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U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT

USAID Program and Operations Assessment Report No. 16

Center for Development Information and Evaluation

January 1997

USAID's Population and Family Planning Program

A Synthesis of Six Country Case Studies

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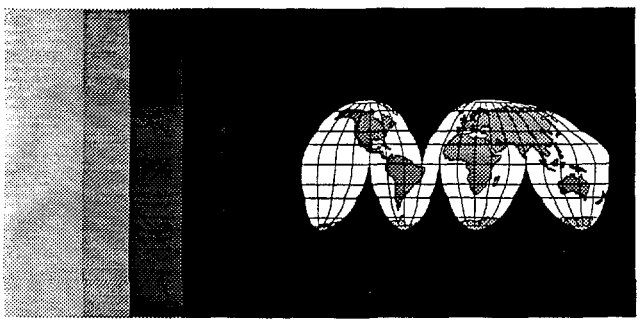

USAID Program and Operations
Assessment Report No. 16

USAID's Population and Family Planning Program

A Synthesis of Six Country Case Studies

by

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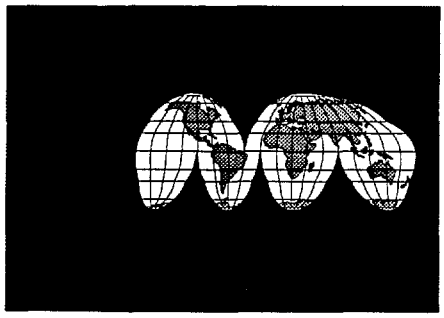
Center for Development Information and Evaluation
U.S. Agency for International Development

January 1997

Disclaimer

The evaluations for this synthesis report were undertaken from 1990 to 1992, with field studies conducted in Ghana, Honduras, Kenya, Pakistan, the Philippines, and Tunisia. The data and conclusions therefore represent our best knowledge and assessment at the end of the 1990 decade. They missed, for example, the turnaround in lowering fertility that occurred in Ghana in the early 1990s. Ghana today is a major success story, dropping total fertility from 6.4 in 1988 to 5.5 in 1993 and doubling contraceptive prevalence during that period.



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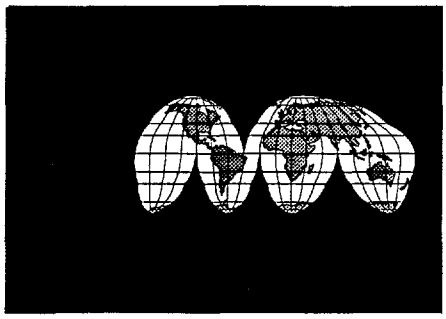

Summary

This Center for Development Information and Evaluation (CDIE) assessment of population and family planning programs is based on six case studies in Ghana, Honduras, Kenya, Pakistan, the Philippines, and Tunisia.

This retrospective study analyzes U.S. Agency for International Development (USAID) contributions to family planning programs, and identifies lessons to improve program effectiveness and impact.

The six cases were selected in part because of their variety and potential instructiveness—not necessarily because of the success of the particular country's program. CDIE wanted examples of programs that had been difficult to administer, as well as those considered reasonably trouble-free and successful. Although the case studies do not represent the full range of countries in which USAID provides assistance, nevertheless, they demonstrate what can be achieved even in extremely challenging environments (see box 1, page viii).

Although fertility has declined in most countries, the job is by no means done. Simply maintaining current rates of contraceptive use will require that family planning programs serve more than 100 million additional contraceptive users in the year 2000 than in 1990. And estimated annual costs of effectively meeting needs during the remaining 1990s will double.

Impact

CDIE examined how family planning programs affected fertility, health, and the social sectors in the six countries and how USAID contributed to those results. It concluded that the Honduran, Kenyan, Philippine, and Tunisian family planning programs have had a positive impact on all these areas. CDIE also examined the effect of lower fertility on the household in Pakistan, the only country where such data were available.

Despite demographic and health improvements in the four countries, there are strong indications that unmet need continues to be high in all six countries. Unmet need refers to the percentage of fecund women who want no more children or want to delay the next pregnancy by two or more years, but are not using contraception.

Demographic Impact

In the early 1960s, all six countries had total fertility rates of six or more children. Kenya's

fertility rate in excess of eight was exceptionally high. By the early 1990s, the fertility rates of four of the countries—Honduras, Kenya, the Philippines, and Tunisia—had declined significantly.[1]

After analyzing the four factors that immediately affect fertility—abortion, contraception, marriage patterns, and duration of breastfeeding—CDIE concluded that the factor that contributed most to fertility decline in these countries was the increased use of modern, effective contraceptives, such as pills, IUDs, injections, and sterilization. Increased contraceptive use was attributable to the countries' national family planning programs, because 70 percent to 80 percent of contraceptive users obtained their products and services from these programs.

Health Impact

Because pregnancy, birth, and pregnancy termination are among the most significant health risks in the developing world, CDIE examined the effect of family planning on women's and children's health. It concluded that family planning programs have substantially improved health in Honduras, Kenya, the Philippines, and Tunisia, based on three observations:

1. In Tunisia, the Philippines, and Kenya, fertility rates fell considerably in birth categories considered high risk for the woman and the infant (when the woman is too young, too old, or giving birth to the fourth or higher child; or the interval between births is less than two years). The Tunisian family planning program reduced the proportion of high-risk births by 2 percent by 1970 and by 24 percent by 1990, contributing increasingly to child survival over the 20-year interval.

2. In Tunisia, family planning, compared to other health interventions, was responsible for approximately one fifth of the overall decline in infant and child mortality during the 1970s and 1980s.

3. In Tunisia, the increased availability of family planning services contributed to a reduction in abortion, thus enhancing women's health.

Although health is only a secondary focus of many family planning programs, CDIE considers the health results significant. This analysis, however, underestimates the effect of family planning on health in at least two ways. First, it looks only at infant mortality, and does not consider the effects of spacing on the preceding child (who is also more likely to survive when births are spaced) or the mother. Second, it does not examine cost: data from Honduras indicate that a birth with complications, which is more common when the birth interval is less than two years, costs more than double a normal birth.

Social Sector Impact

CDIE used the FamPlan (Family Planning Program Evaluation, Planning, and Financial Analysis) model to assess the effect of family planning on the social sector. Because government social services expenditures (in health, housing, and education) depend on population size, expenditures increase with population growth. In Kenya, Pakistan, the Philippines, and Tunisia, the analysis estimated cumulative savings of more than $5 billion in the social service sectors, over a span of 20 to 30 years, as a result of births averted through family planning. Family planning programs should be considered important for governments trying to improve the quality and coverage of social services while containing costs.

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[1] Ghana's fertility dropped from 6.4 in 1988 to 5.5 in 1993, but the breakthrough in contraceptive use did not occur until after this evaluation was conducted.

Household Impact

CDIE was able to gather data from only one country, Pakistan, on the effect of low fertility on households. The data show that low-fertility households in Pakistan have

- higher male and female school attendance
- higher per capita incomes
- substantially greater savings

What Results Are Attributable to USAID?

USAID made important contributions:

- In each country—including Pakistan and Ghana, where demand for family planning was relatively low—empirical evidence shows that USAID-supported interventions increased the use of contraceptives substantially.
- USAID was the principal donor for family planning in each country, contributing 40 percent to 60 percent of all family planning resources during a 20-year interval.
- The most frequently used modern contraceptive methods were ones strongly supported by USAID—principally female sterilization, pills, and IUDs—which accounted for 92 percent to 96 percent of the modern methods used in three of the countries.

In Honduras, Kenya, the Philippines, and Tunisia, the programs were distinguished by their success in covering urban and rural populations with family planning providers, services, and service outlets. These countries trained more physicians and health service providers, made modern, effective contraceptives more accessible and available to the majority of the populace, established more delivery channels, and educated more couples than did the other two countries. They also were more likely to respond to clients' needs by providing contraceptives and services more suited to or demanded by the population. USAID support made many of these activities possible.

While no demographic or health effects were able to be measured in Pakistan, USAID contributed to changes that are precursors to fertility decline. In Ghana, USAID-supported interventions increased knowledge of family planning. Recent survey data have shown that contraceptive use increased from 0 to 5 percent in 1988 to approximately 15 percent in 1993. In Pakistan, USAID developed institutional capacity in logistics, research, evaluation, and voluntary sterilization. Contraceptive use there reached 12 percent in 1990.

Efficiency

CDIE used the FamPlan model to estimate costs per birth averted in Kenya, Pakistan, the Philippines, and Tunisia. The analysis found that costs declined during the past 20 years in all countries except Tunisia. Overall, these data suggest that family planning programs can become more efficient over time.

While costs per birth averted generally declined, they remained high in 1990. A cost of $20 per birth averted is considered acceptable, but 1990 costs for all case study countries except the Philippines substantially exceeded this amount.

Neither USAID nor the six countries had given sustained attention to efficiency measurement.

Financial Sustainability

In all case study countries, USAID supported first steps toward making the family programs financially sustainable. Some activities shifted public sector costs to the private sector; others tested a wide variety of cost-recovery strategies. USAID's work helped mobilize an international consensus favoring greater reliance on private sector service

delivery. Still, none of the six family planning programs is financially self-sufficient.

There was, however, evidence of progress toward sustainability, which has important implications for Agency planning. In the countries where USAID took serious steps toward encouraging financial sustainability, progress was evident, even in extremely poor countries.

In addition, savings outweighed costs in the four countries analyzed. Benefit–cost ratios for the Philippines and Tunisia were large: 10.65 for Tunisia in 1990 and 9 projected for the Philippines in 2000. This suggests that for each Tunisian dollar or Philippine peso invested in the national family planning program, the governments in these two countries eventually will recoup 9 to 10 dollars or pesos in lower expenditures. While benefit–cost ratios were substantially lower in Kenya and Pakistan, they were projected to be more than 1 in the year 2000, meaning that government social sector savings will exceed its investments in family planning.

Box 1. Selected USAID Projects: Achievements and Effects

Project, Dates, and Funding	*Activities*	*Achievements*	*Results*
		Tunisia	
Support for the Association for Voluntary Surgical Contraception USAID was primary donor	Female sterilizations	From 1974–92, 65,000 of the 150,000 female sterilizations were funded by the association with USAID support	By 1988, female sterilization was second-most used method and accounted for 25% of the increase in modern method prevalence between 1978 and 1988
Support for Program for International Training in Health and Johns Hopkins Program for Internat'l Education in Gynecology and Obstetrics USAID was primary donor	Training in IUD insertions	Between 1978–91 USAID trained hundreds of physicians, nurses, and midwives in IUD insertion	By 1988, IUDs were the most used contraceptive method and accounted for more than 45% of 1978–88 increase in prevalence; IUDs and female sterilization, strongly supported by USAID, accounted for 70% of 1978–88 increase
Support for the Population Council 1981–87 $3.9 million USAID was primary donor	Strengthening mobile units for rural outreach	By 1990, 67 mobile teams and 10 mobile clinics were bringing services to rural areas	By 1985, new users through mobile units increased by 54% and mobile units were providing a third of family planning program output

Box 1. Selected USAID Projects: Achievements and Effects (cont.)

Project, Dates, and Funding	*Activities*	*Achievements*	*Effects*
Honduras			
Support for Ministry of Health, Maternal and Child Health Family Planning Project 1965–76 $3.7 million	To reduce birth rate and population growth	Family planning unit set up in Ministry of Health, 34 family planning clinics created and staffed	38,000 users; no effect on birth rate
Support for Ministry of Health, Integrated Rural Health Family Planning Project 1976–81 $3 million	To support integration of family planning and public health services	•Three permanent training sites •Nurses, midwives, guardians trained	After project approved, ministry refused to implement
USAID support for ASHONPLAFA* (seven projects) 1980–84 USAID direct support covered nearly 60% of ASHONPLAFA's $2.2 million budget	•Service delivery •Clinic expansion •Commercial retail sales •Leadership education	•Distribution posts increased from 437 to 706 •More than 1,000 unsalaried community-based distributors assisted	•Number of contraception users unchanged 1980–82 •Users increased 58% 1982–84 •Sterilizations increased 76%, 1983–84
USAID Support for the Ministry of Health, Health Sector I Project 1981–88 Family planning component: $1.3 million	Technical assistance, training, and equipment to improve service delivery	•80% of nurses trained in barrier methods and pills •46% of supply posts did not run out of contracptives in the previous three months (target was 80%) •93% of women knew one method of family planning (target 90%) •No midwives trained (target 70%)	Only 18,000 new users

*ASHONPLAFA is a private, nonprofit, nongovernmental family planning organization in Honduras.

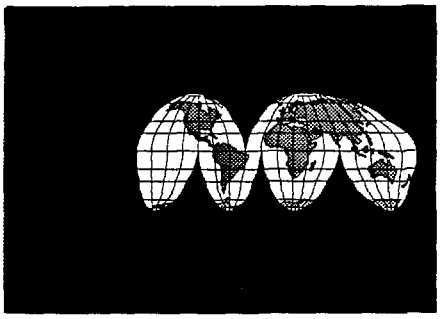
Box 1. Selected USAID Projects: Achievements and Effects (cont.)

Project, Dates, and Funding	*Activities*	*Achievements*	*Effects*
		Honduras (cont.)	
Private Sector Population Project 1985–89 $9.81 million USAID was primary donor	Expansion of family planning services through private sector	•Five centers established, equipped •Distribution posts increased from 1,000 in 1984 to 1,478 in 1989 (target 1,500)	•Sterilizations increased from 32,000 in 1984 to 73,000 in 1989 (target 90,000) •18,000 clinic users in 1988 (target 19,500 in 1989), but use plummeted after a rumor that IUDs cause cancer •Community-based distribution users increased from 39,000 in 1984 to 46,000 in 1989 (target 54,000) •Contraceptive social marketing users increased from 7,000 in 1984 to 45,500 in 1989 (target 40,000)
		Kenya	
Family Planning Private Sector Project 1983-91 $8.4 million	Training and building institutional capabilities to encourage for-profit firms and NGOs to offer services	•Helped 59 private institutions provide services at 154 delivery points •More than 104,000 new clients	The private sector accounts for 10% to 13% of contraceptive use
Several projects; support for Chogoria Hospital since 1983	Community-based distribution of family planning services	Trained staff at hospital's community health department	Contraceptive prevalence 43% compared to 17% for the whole country, and fertility rate was 5.2, almost three births lower than country average
Support for voluntary surgical contraception USAID was sole donor	Delivery of surgical contraception services	Sterilized more than 50,000 women; now second most popular method of contraception	More than 14% of married rural women protected by tubal ligation—almost double the rate in other districts

Box 1. Selected USAID Projects: Achievements and Effects (cont.)

Project, Dates, and Funding	*Activities*	*Achievements*	*Effects*
Philippines			
Population Planning II, 1977–80 Population Planning III 1980–86	$14 million government outreach project received 75% of funds	•Sterilization •Education •Logistics	Outreach program increased contraceptive use
Ghana			
Contraceptive Supplies 1985–92 Education component—USAID was major donor	Culturally sensitive, multilingual, multimedia education campaign on child spacing and service availability	•Trained providers in counseling •Audiovisuals for clients •Information campaigns	More than 90% of men and women were exposed to messages—first year increases in contraceptive use neared 90%
Contraceptive Social Marketing I and II 1988–89; 1989–91 USAID was sole donor	Sold condoms, pills, and vaginal methods	Program helped increase delivery points for contraceptives	Steady increase in sales—protection years increased from 62,000 in 1987 to 115,000 in 1991
Family Planning Enterprise Program 1988–91 $286,000 USAID was sole donor	Private sector birth attendants trained and equipped	3,000 traditional birth attendants trained to provide contraceptives	No data available

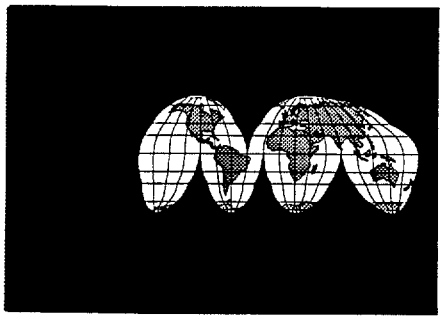
Box 1. Selected USAID Projects: Achievements and Effects (cont.)			
Project, Dates, and Funding	***Activities***	***Achievements***	***Effects***
Pakistan			
Social Marketing of Contraceptives $45 million 1984–91 USAID was sole donor	Distribution of condoms through private sector		Condom sales doubled from 30 million (1987) to 73 million (1991)
Voluntary Surgical Contraception $5.1 million 1986–91 USAID was sole donor	Technical assistance and training in surgical contraception services		Number of female sterilizations increased by 9% annually from 1986 to 1991



Glossary

ASHONPLAFA	Private, nonprofit, non-governmental family planning organization in Honduras
CDIE	Center for Development Information and Evaluation
Contraceptive social marketing	Applying commercial marketing techniques–such as market research, mass media advertising, promotional activities, retailer training, and commercial distribution—to increase the availability of contraceptive information and products. The goal is to sell moderately priced products to consumers at low socioeconomic levels who would not otherwise use contraceptives.
Couple year of protection	Each year that contraception use protects a couple from pregnancy
DHS	Demographic and Health Survey
FamPlan	Family Planning Program Evaluation, Planning, and Financial Analysis
GAO	General Accounting Office
IUD	Intrauterine device
NGO	Nongovernmental organization
POPCOM	Population Commission (Philippines)

Proximate determinants of fertility	Factors that influence fertility directly, such as marriage patterns, duration of breastfeeding, contraception use, and abortion
Total fertility rate	The number of children a woman would have if she were to live to the end of her childbearing years and bear children at each age in accordance with age-specific fertility rates
Unmet need	The percentage of fecund married women who either want no more children or want to delay the next pregnancy by two or more years, but who are not using contraception



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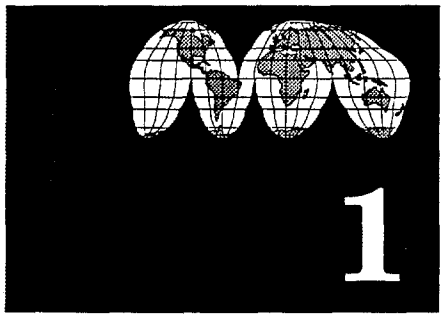


1 Background

USAID'S POPULATION and family planning assistance program has four objectives:

1. Promoting the rights of couples and individuals to determine freely and responsibly the number and spacing of their children

2. Improving individual health, with special attention to the reproductive health needs of women and female adolescents and the general health of infants and children

3. Reducing population growth rates to levels consistent with sustainable development

4. Making programs responsible and accountable to customers

USAID's family planning assistance program reflects findings from worldwide demographic data. The data indicate that substantial unmet need exists for family planning; the availability of safe, acceptable family planning services leads to acceptance and use; and the spacing of births two or more years apart significantly lowers maternal, infant, and child death rates.

USAID initiated a small program of assistance for population and family planning activities in developing countries in 1965. The Agency's investment took a quantum leap in 1967 when Congress earmarked $67 million for this purpose. In 1994 annual population assistance reached $475 million, the highest in the history of the program, when Congress increased its appropriation by $42 million above the 1993 level. This money funds population activities and technical assistance in 77 developing countries; small amounts of commodities for another six developing countries; and worldwide research, demographic surveys, and policy analyses.

Since 1965, USAID has provided $5.8 billion for population and family planning. This is less than 2 percent of American foreign assistance, but more than 40 percent of all donor funds, making the United States the largest international family planning donor. For the past 10 years, 10 percent to 14 percent of USAID development assistance has been allocated to population. Bipartisan support for the program has been consistently strong in Congress and the Executive Branch.

Congressional Guidance

In its first authorization of population assistance in 1967, Congress cited the importance of voluntary family planning for economic development. Subsequent foreign assistance legislation and committee reports have continued to support family planning. Congressional emphasis on the negative effects of unrestrained population growth on economic development has been strong and consistent. A 1990 General Accounting Office (GAO) report ques-

tioned whether USAID's population policy after 1980 fully reflected congressional intent—that U.S. population assistance be directed to reducing population growth rates and motivating couples to have smaller families.

As a measure of its strong support for family planning, Congress has regularly earmarked development funds for population assistance since 1967. For the past several years, congressional appropriations have exceeded administration requests.

Foreign assistance legislation prohibits the use of U.S. assistance to perform abortions or involuntary sterilizations or to conduct biomedical research related to abortion or involuntary sterilization. At a population conference in Mexico City in 1984, the Reagan administration extended this prohibition to U.S. or U.S. grantee assistance to foreign nongovernmental organizations (NGOs) that perform or actively promote abortion as a method of family planning in foreign countries. On January 22, 1993, President Bill Clinton directed USAID to remove all conditions of the Mexico City Policy not required by law.

USAID's Approach

USAID assistance supports a range of activities, including technical assistance, to strengthen the family planning programs of developing countries. These include expanded access to services, through public, private nonprofit, and private commercial channels; contraceptive supply; information, education, and communication; data collection; population policy development; and applied and operations research.

Expanded Access to Family Planning Services

USAID aims to expand access to family planning by increasing service-delivery points. It has supported a network of host country, U.S., and international family planning organizations, and has launched an array of innovative service-delivery approaches. These include employee-based programs; contraceptive social marketing programs (using commercial marketing techniques to increase the availability of contraceptives and information about them); work with health insurance companies; and community-based distribution programs by health service providers or lay workers. USAID has led the way in involving the private sector, both for-profit and nonprofit, in family planning.

Contraceptive Supply

In FY 1994, USAID shipped an estimated $48.9 million of contraceptives to 65 countries in the developing world. This represents 50 percent to 70 percent of publicly provided contraceptives in these countries. The commodities include oral contraceptives, intrauterine devices (IUDs), condoms, Depo-Provera, vaginal foam tablets, and, for the first time, the contraceptive implant Norplant. (The condom shipments include those purchased for the prevention of HIV/AIDS.)

Information, Education, and Communication

USAID has regularly supported development of national communications strategies to increase awareness, knowledge, and effective use of family planning methods. These strategies have used mass media, printed materials (including for nonliterate people), videos, and nontraditional media. USAID has played a key role in developing training programs to enhance communication skills of family planning managers, service providers, and counselors.

Data Collection

During the past 20 years, USAID has supported 160 surveys in 70 countries. It has made a landmark contribution to the study of fertility, health, and contraceptive prevalence

trends by initiating the Contraceptive Prevalence and Demographic and Health Surveys (DHS). These studies have provided a wealth of information to guide policymakers and family planning program development.

Population Policy Development

In 1965, only 9 developing countries had policies favoring slower population growth; now about 70 have such policies. Recently, USAID's policy support activities have expanded to focus on legal, regulatory, and other constraints to family planning service delivery or access.

Applied and Operations Research

USAID is the single largest bilateral donor in the field of contraceptive research and has contributed to the development or improvement of contraceptive methods such as Norplant, the Copper T 380A IUD, a transdermal cream, new condoms for men and women, new barrier methods such as the vaginal sponge, and new techniques for male and female sterilization.

USAID's many operations research programs, which develop and test more effective and varied approaches to managing and providing family planning and population services, have contributed to improved access and quality.

Assessment Methodology

This assessment addresses the following questions:

- Have USAID-assisted family planning programs had an impact on fertility and health?
- Are USAID-assisted family planning programs effective and efficient?
- Are the programs financially sustainable?
- To what extent has USAID contributed to improvements in efficiency, effectiveness, and sustainability?

CDIE used the case study methodology, identifying six countries that would provide an instructive cross-section of experience. Country programs were selected that met the following criteria:

Geographical representation. CDIE selected two countries in sub-Saharan Africa, two in Asia, and one each from Central America and North Africa. The sub-Saharan Africa selections provided some subregional variation, with Kenya in East Africa and Ghana in West Africa. Similarly, Asian countries were drawn from south and east Asia.

Program magnitude and duration. CDIE selected countries in which the USAID program was of sufficient magnitude and duration to produce a substantial record of experience. In all six case-study countries, USAID had been supporting family planning for at least 20 years. Support for Pakistan began in 1964; Honduras in 1965; Ghana, the Philippines, and Tunisia in 1968; and Kenya in 1972. Among the top 40 countries receiving USAID population funds from 1965–92, the countries ranked as follows: Pakistan 3rd, the Philippines 5th, Kenya 7th, Honduras 17th, Tunisia 18th, and Ghana 22nd. Table 1 shows the level of USAID assistance compared to population size.

Special considerations. CDIE wanted examples of programs that had been difficult to administer, as well as those considered reasonably trouble free and successful. It wanted countries that would permit comparisons and contrasts in cultural characteristics (that is, two sub-Saharan countries, two Catholic countries, two Muslim countries) and countries at various stages of program development.

A team of professionals spent approximately one month in-country for the field studies. (The Pakistan program was examined as a desk study.) The teams reviewed documents; interviewed key informants; conducted focus group research; and undertook cost-effective-

ness and cost-benefit analyses, small surveys, and site visits. They examined data on a range of indicators, including total fertility rate, contraceptive prevalence rate, use of contraceptives by the intended target group, and coverage of family planning services. This approach enabled CDIE to assess the record of each country's family planning program from the inception of USAID funding through 20 years or more of experience, and to form fairly firm conclusions about program performance and results.

Because CDIE had to set time limits for completing the country studies, it was not possible to consider subsequent developments that might mitigate some of the less favorable conclusions CDIE reached in its analysis. Each country study is available as a technical report from CDIE.

Table 1. Trends in Major Demographic Indicators

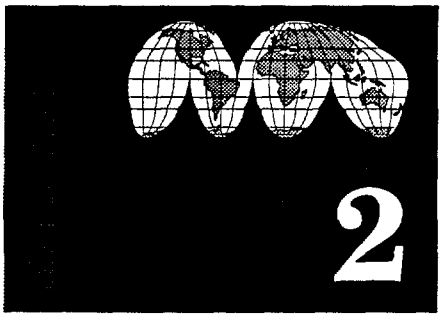
Year*	Total Population (millions)	Crude Birth Rate	Total Fertility Rate	Infant Mortality Rate
		Ghana		
1960	6.77	47.6	6.90	127
1970	8.61	45.8	6.64	107
1980	10.74	45.2	6.50	98
1990	15.03	43.5	6.29	81
Ratio, 1990/1960	2.22	0.91	0.91	0.64
Total USAID funding: $36 million				
		Honduras		
1960	1.94	51.2	7.36	136
1970	2.63	48.7	7.38	110
1980	3.67	42.3	6.16	82
1990	5.14	37.1	4.94	57
Ratio, 1990/1960	2.65	0.72	0.67	0.42
Total USAID funding: $45 million				
		Kenya		
1960	8.33	52.8	8.12	118
1970	11.50	52.9	8.12	98
1980	16.63	51.1	7.92	80
1990	24.03	47.0	6.80	64
Ratio, 1990/1960	2.88	0.89	0.84	0.54
Total USAID funding: $87 million				

Table 1. Trends in Major Demographic Indicators (cont.)

Year*	Total Population (millions)	Crude Birth Rate	Total Fertility Rate	Infant Mortality Rate
		Pakistan		
1960	49.96	48.4	7.00	155
1970	65.71	47.5	7.00	140
1980	85.30	50.3	7.00	120
1990	122.63	41.9	5.94	98
Ratio, 1990/1960	2.45	0.87	0.85	0.63
Total USAID funding: $150 million				
		Philippines		
1960	27.56	43.6	6.61	76
1970	37.54	36.9	5.29	64
1980	48.32	35.6	4.74	51
1990	62.41	30.4	3.91	40
Ratio, 1990/1960	2.26	0.70	0.59	0.53
Total USAID funding: $151 million				
		Tunisia		
1960	4.22	46.5	7.17	155
1970	5.13	37.1	6.15	120
1980	6.38	33.7	4.88	71
1990	8.18	27.2	3.38	44
Ratio, 1990/1960	1.94	0.58	0.47	0.28
Total USAID funding: $43 million				

*For crude birth, total fertility, and infant mortality rates, the reference period is a five-year interval beginning with the stated year. For example, for these measures, the year "1960" actually refers to the interval 1960–64.

Source: United Nations Population Division 1992



2 Results of USAID-Assisted Family Planning Programs

WHAT IMPACT did family planning programs have in the six countries? This section examines changes in fertility, contraceptive prevalence, population growth, and infant mortality (through the indirect mechanism of reducing births in high-risk categories), and the role of family planning in these changes. It looks at the influence of family planning at the macro level (government social sector expenditures) and at the micro level (the household).

This section also examines USAID's contributions. While not all accomplishments of family planning programs are directly attributable to USAID's investments, the Agency was the single largest donor for most programs. And for certain program areas and family planning methods, USAID was the sole donor. In these cases, more firm conclusions can be drawn about USAID's role.

CDIE used two indicators to analyze changes in fertility and contraceptive use: total fertility rate and contraceptive prevalence rate. Total fertility rate is the number of children a woman would have if she were to live to the end of her childbearing years and bear children at each age in accordance with age-specific fertility rates. Contraceptive prevalence rate is the percentage of women using any contraceptive method, modern or traditional. CDIE also examined the percentage of women using modern contraceptive methods.

Impact on Population Growth, Fertility, and Contraceptive Use

All of the case study countries experienced substantial population growth during the past 30 years (see table 1, page 4). In fact, Tunisia was the only country that did not at least double its population during this period. Most of the growth was due to rapid drops in mortality—at all ages, but especially among infants and children—combined with fertility rates that declined more slowly.

After 1960, when total fertility rates were about 7–8, fertility rates fell in all six countries over the 30-year period (see table 2). Declines varied greatly, however. By the early 1990s, the total fertility rate in Tunisia was well below 4; in the Philippines it was approximately 4; in Honduras it was approximately 5; and in Ghana, Kenya, and Pakistan, it was at 6 or 7.

Total Contraceptive Use and Modern Method Use

Contraceptive use increased in all six countries. In Honduras, Kenya, the Philippines, and Tunisia, it increased about 20 percent. The gain for Ghana and Pakistan was much lower,

Table 2. Fertility Decline in CDIE Case Study Countries

Country	1960 Total Fertility Rates	1988 Total Fertility Rates
Tunisia	7.17	3.38
Philippines	6.61	3.91
Honduras	7.36	4.94
Pakistan	7.00	5.94
Ghana	6.90	6.29
Kenya	8.12	6.80

about 3 percent to 4 percent during the time period of this report.[1]

Even more important, use of modern contraceptive methods increased in all six countries (see figure 1). While increases in total contraceptive prevalence are important, gains in modern method prevalence are of much greater consequence for fertility decline. Modern methods include female and male sterilization (tubal ligation and vasectomy), pills, IUDs, contraceptive implants, and condoms. These are more effective than traditional methods such as rhythm (periodic abstinence), withdrawal, or herbs. They are also more central to most family planning programs, and therefore more relevant for evaluation.

Ranked in use of modern methods from highest to lowest (total contraceptive prevalence in parentheses), the case study countries are

- Tunisia, 40 percent (50 percent)
- Honduras, 33 percent (41 percent)
- the Philippines, 22 percent (36 percent)
- Kenya, 18 percent (27 percent)
- Pakistan and Ghana, below 10 percent (below 15 percent)

The three modern methods provided by the national family planning programs and supported by USAID were overwhelmingly dominant in the six countries. Female sterilization, pills, and the IUD accounted for 96 percent of modern contraceptive use in the Philippines, 92 percent in Tunisia and Honduras, 76 percent in Kenya, 63 percent in Ghana, and 61 percent in Pakistan. Male sterilization was virtually unknown in these countries.

The concentration of these three methods was substantially greater in the three countries with the highest levels of contraceptive use.

Contraceptive Use and Fertility Decline

Researchers recognize that a wide range of factors influences fertility (Bongaarts 1978, 1982). The most important are marriage patterns (age at marriage and proportion of women who marry), duration of breastfeeding (which delays resumption of ovulation after giving birth), contraception use, and abortion.

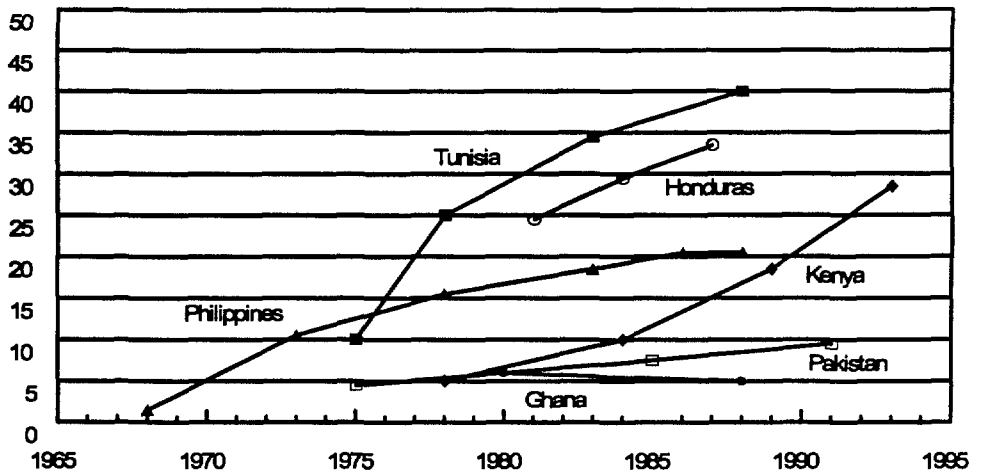
During a demographic transition from high to low fertility, most countries experience a rise in age at marriage, which reduces fertility. Duration of breastfeeding tends to decline, which increases fertility, but this is usually offset by a concurrent increase in contraceptive use. The extent of abortion is not well documented in general, nor are there good estimates for five of the case study countries. Information on this topic was available for Tunisia, where abortion is legal and widely available at health facilities. (The Tunisian family planning program, however, does not consider abortion a family planning method.)

Debate continues about the effect and interaction of the four major determinants of fertility. Researchers have developed techniques to

[1] Contraceptive prevalence in Ghana doubled from 1988 to 1993, (from 5 percent to 10 percent for modern methods and 13 percent to 20 percent for all methods). This increase was not achieved at the time this evaluation was conducted.

Figure 1. Use of Modern Methods of Contraception in the CDIE Case Study Countries

Survey Data for Selected Years



Source: Ross et al. 1993

analyze the relative effect of these determinants over time. Some were used in the CDIE assessment and are discussed below.

A second area of debate involves the indirect influence of socioeconomic factors on fertility. For example, an increase in the number of women in the labor force may reduce duration of breastfeeding, which would lead to higher fertility. This is counterbalanced, however, by increased availability and use of modern contraceptives.

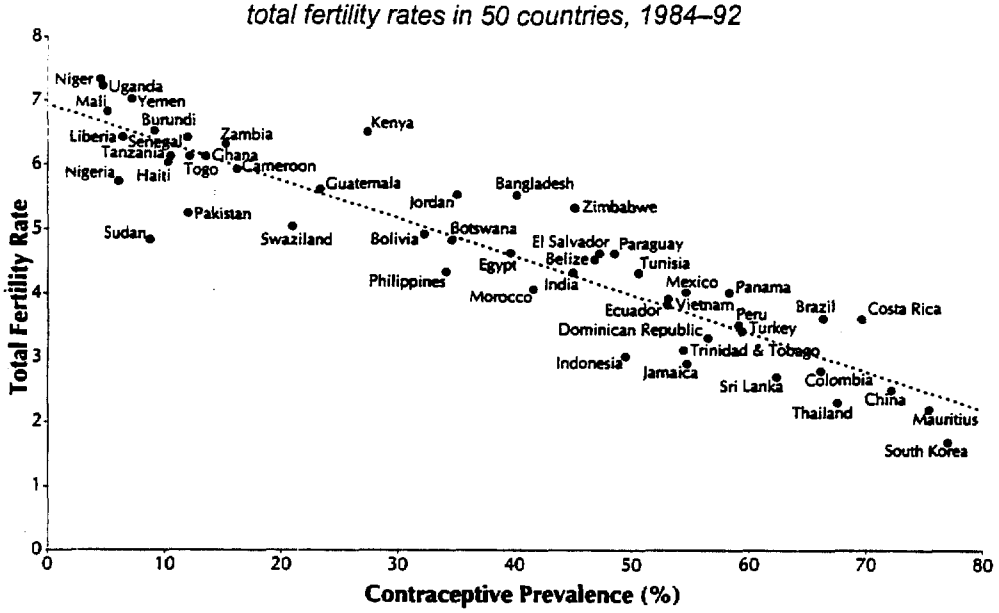
The effects of these factors are less easily measured, and some demographers believe that analyses have not yet adequately assessed the relationship between broad social, economic, and cultural changes and declining fertility levels (McNicoll 1992).

Yet empirical evidence from countries at similar levels of development indicates that those countries with stronger family planning programs have higher levels of contraceptive use and lower fertility. Regardless of the debate over the relationship between socioeconomic development and fertility, there is widespread agreement that the most important determinant of fertility is the use of effective contraception.

In country after country, surveys reveal that where few couples use contraceptives, fertility is high. Where contraceptive use is widespread, fertility is low. (Figure 2 presents empirical evidence from 50 countries that supports these statements. Differences in levels of contraceptive use account for 92 percent of the variation in fertility.) Survey research indicates that the total fertility rate decreases by approximately one birth with every 15 percentage point increase in contraceptive use (McNicoll 1992).

Figure 2. Contraceptive Prevalence and Fertility

Relationship between contraceptive prevalence and total fertility rates in 50 countries, 1984–92



Note: The dotted line is a regression line that shows the relationship between contraceptive prevalence and total fertility rate in these countries as it can best be represented by a straight line.

Population Reports

Source: "The Reproductive Revolution: New Survey Findings" 1992, 9

CDIE analyses indicate that in four of the six countries, the most important reason for fertility decline was increased use of family planning, and especially, increased use of modern contraceptives. In Ghana and Pakistan such an analysis is meaningless because there was no substantial fertility decline[2] for reasons outlined in the technical reports. For the four other countries—Honduras, Kenya, the Philippines, and Tunisia—data presented in the technical reports support the following conclusions:

Honduras

From 1981 to 1991, contraceptive use increased from 26.6 percent to 46.7 percent, while total fertility declined from 6.4 to 5.1. During this period, the mean duration of breastfeeding increased from 15.2 months to 17.2 months, which would contribute to declining fertility, while the marriage patterns remained relatively constant. The question is why fertility did not decline further, given the significant increase in contraceptive use. Among probable reasons are marriages (or consensual unions) and childbearing at an early age; breastfeeding with limited fertility-inhibiting effect because of early supplementation with solid foods; high proportion of use of traditional contraceptive methods; unusually high discontinuation rates; and the lower effectiveness of traditional methods.

Kenya

The reduction in breastfeeding would have increased fertility by 1.4 births per woman between 1977 and 1989, but contraception and changing marriage patterns counteracted this,

[2] Ghana's fertility rate dropped significantly, however, by 1993, from 6.4 in 1988 to 5.5 in 1993.

Table 3. Source of Contraception for Married Women Aged 15–49 Using Clinical and Supply Methods* (%)

Source	Honduras 1987	Kenya 1989	Pakistan 1985	Philippines 1988	Tunisia 1988
Public [a]	19.0	70.5	70.5	70.5	76.6
Private [b]	70.8	27.7	0.0	22.0	9.3
Private pharmacy	7.8	0.8	26.5	4.9	13.6
Other (source not indicated)	2.4	1.0	3.0	2.6	0.5
Total	100	100	100	100	100

*Clinical and supply methods of contraception refer to female sterilization, male sterilization, pills, injectables, IUDs, condoms, or female barrier methods.

[a]Public sources include government hospitals, health centers, and dispensaries.

[b]Private sources include nongovernmental organizations, mission and church clinics, other private clinics, private physicians, shops, friends, and relatives.

Note: Ghana is omitted because contraceptive prevalence was low at this time.

Source: United Nations Population Division 1992; and University of the Philippines Population Institute

reducing fertility by 2.9 births per woman. Changing marriage patterns accounted for 0.9 of the reduced fertility rate; 2.0 was due to increased contraception.

Philippines

The largest declines in fertility immediately followed the largest increases in use of modern contraceptives. Because of minimal change in age at marriage and duration of breastfeeding, most of the fertility decline can be attributed to increased contraceptive use.

Tunisia

The trend toward later marriage is responsible for much of the overall fertility decline in the 1960s and early 1970s. It is clear, however, that most of the decline in fertility in Tunisia since the mid-1970s is attributable to increased use of contraception, stimulated by a desire for smaller families.

Family Planning and Increased Contraceptive Use

In five of the six CDIE case study countries, an organized family planning program accounts for the majority of contraceptives and services delivered (see table 3). This suggests the importance of organized, national programs in influencing contraceptive use in these countries. In four cases, public sector agencies administered the program. Honduras used a private, nonprofit organization. Even the commodities delivered through private pharmacies reflect program services to some degree, because many pharmacies sell products available through a public or private nonprofit social marketing program.

Approximately 70 percent to 80 percent of users of modern contraceptive methods in Honduras, Kenya, Pakistan, the Philippines, and Tunisia obtain their contraceptive products and services from organized family planning programs. The importance of program outlets is even greater for highly effective clinical methods, mainly sterilization and IUDs. To the extent that other sources are significant, they are used for resupply methods such as pills and condoms.

In Tunisia, Honduras, the Philippines, and Kenya, family planning programs contributed to contraceptive use above and beyond what would have occurred in the absence of a program. These data indicate what a well-managed program can achieve:

- In Honduras and Tunisia, the percentage of women with no formal education who used contraceptives was high (22 percent and 37 percent, respectively), compared with countries where family planning programs are less successful. The use of family planning by uneducated women suggests a relatively strong program effect.
- A 1987 study conducted in a poor rural area in Tunisia showed that, compared to nonprogram areas, adding an information, education, and communication component to family planning services resulted in a 125 percent increase in new users. Adding both that component and new service centers resulted in a 295 percent increase in new users (Coeytaux et al. 1987).
- A 1980 multivariate analysis in the Philippines indicates that the USAID-supported outreach program significantly influenced contraceptive prevalence in outreach areas, compared to nonprogram areas, independent of other program efforts and concurrent social change. In USAID-supported program outreach areas, use of female sterilization increased from 4.9 to 14.4 percent between 1977 and 1980 (Schmeding et al. 1992).
- In Tunisia, a 1991 statistical analysis of variables affecting fertility intentions (male and female education, age, residence, income) found that the most important variables were level of mortality in the community and access to family planning methods (as indicated by the number of methods available in the community). Wife's education was rarely found to have an effect. (See section on women's status, page 21.) This suggests the Tunisian family planning program was central to stimulating the desire to use contraception (Cochrane and Guilkey 1991).
- In Kenya, the USAID-supported Chogoria Hospital program reduced fertility in the surrounding areas to much lower levels than achieved elsewhere in rural Kenya or most countries of sub-Saharan Africa. The contraceptive prevalence rate there was an impressive 43 percent compared with Kenya's overall rate of 17 percent. The total fertility rate was 5.2, almost three births lower than the average for rural Kenya.

These data suggest that in all four countries, family planning programs, or program components, have directly and significantly increased contraceptive prevalence, above and beyond what would have occurred as a result of socioeconomic development.

Unmet Need

Continued unmet need in all case study countries indicates much remains to be accomplished.

Unmet need refers to the percentage of fecund married women who either want no more children or want to delay the next pregnancy by two or more years, but are not using contraception. Total demand includes those who are practicing contraception and those with an unmet need.

Even in Pakistan, where demand is lower than in the other countries, survey data indicate

unmet need is high, 28 percent. In Ghana, data indicate that 14 percent of women with partners want no more children, and another 34 percent want to postpone the next birth. However, only 13 percent are using family planning. These data show that even where national programs are less effective, women see themselves in need of family planning; a well-managed family planning effort could meet this demand. USAID, however, had terminated its program in Ghana for a five-year period in the early to mid-1980s.

Meeting unmet need would substantially increase contraceptive use. This may be a more politically and culturally acceptable rationale for expanding family planning than limiting population growth in some countries. USAID-supported family planning programs have created new demand for contraceptives by successfully meeting current demand and increasing awareness of and knowledge about family planning.

Impact on Health

Pregnancy, birth, and pregnancy termination are among the biggest health risks in developing countries. Four categories of births carry greater risks of infant, child, and maternal mortality. These are 1) mother's age at childbirth is younger than 18; 2) mother's age at childbirth is older than 34; 3) birth is of high order (4+); and 4) interval between births is less than 24 months.

One justification for a national family planning program is that reducing high-risk births will have a secondary effect on infant, child, and maternal mortality. In fact, this "family welfare" justification sometimes becomes the main motivation for initiating a family planning program, especially when national leaders are unenthusiastic about "fertility control" as the basis for family planning. This places family planning in a larger framework of maternal health and child survival.

There is a great deal of variation in the risk associated with the four categories. In all countries, however, 1) children born to the youngest and oldest women experience higher mortality than children born to women of intermediate age, and 2) births of high order and births after short intervals lead to higher mortality.

The effect of family planning on child survival depends on overall levels of mortality, differentials in mortality by risk category in a particular country, and the proportion of births in the risk categories.

The most significant risk factor, in terms of relative risk and the proportion of births, is short birth interval. A child born less than 24 months after a sibling has at least a 50 percent greater, and sometimes a more than doubled, chance of dying. For example, 1988 Demographic and Health Survey data from Tunisia showed that infant deaths per 1,000 live births numbered 84 when births were spaced less than two years apart but declined to 32 when births were spaced two to three years apart.

A series of short-interval births results in greater competition among children for parental resources and greater physical depletion of the mother. Generally, the preceding child also has higher risks of mortality when the interval is short, although here the focus is only on outcomes for the subsequent child.

The following analyzes the effect of family planning on: high-risk births, infant deaths averted, and women's health. Also, the estimated contribution of family planning to child survival is compared with other interventions.

High-Risk Births and Infant Deaths Averted

Because of family planning, high-risk births have dropped significantly in Kenya, the Philippines, and Tunisia. Analyses suggest substantial reduction in births in two to three risk categories in each of the countries (see table 4). (Data on fertility reduction due to birth spacing in the Philippines were unavailable.)

Table 4. Percentage Reduction of Births in High-Risk Categories (%)

Country	High Maternal Age	Low Maternal Age	High Birth Order	Short Interval Between Births
Tunisia[a] 1978–88	37	basically no change	21	27
Kenya 1977–89	22	26	15	24
Philippines 1970–85	36	small % of births in this category	data suggest major reductions	no data

[a]Special tabulations prepared by Shea Rutstein and Mohamed Ayad, DHS/Macro International, June 1992.

Note: Data for Ghana, Honduras, and Pakistan unavailable.

The major reductions in fertility in virtually all high-risk categories suggest the program had a strong impact on health.

CDIE used the FamPlan (Family Planning Program Evaluation, Planning, and Financial Analysis) model[3] to assess the effect of family planning on child survival by estimating the number of infant deaths averted, comparing two scenarios from 1970 and 1990, one with family planning and one without.

The analysis indicates the Tunisian family planning program's effect on health has been consistently positive and has improved over time (see table 5). It reduced high-risk births by an estimated 2 percent by 1970, 11 percent by 1980, and 24 percent by 1990, leading to a significant decline in infant deaths. The analysis estimates 67,251 infant deaths were averted by family planning during the 20-year period. While the number was relatively small in 1970 (641), in 1990 alone, 5,923 infant deaths were averted.

CDIE also analyzed the effect of family planning on child survival compared with other interventions. The analysis relied on data from Tunisia (the most successful program in the assessment) as an example of the kind of impact a successful family planning program can have.

From 1978 to 1988, risk of child deaths declined overall in Tunisia because of improvements in public health measures, such as sanitation and vaccinations. These improvements enhanced the survival chances of all children, regardless of risk category. During the 10-year period, the risk fell from 86 deaths per 1,000 children to 51.

Was the family planning program in Tunisia responsible for improvements in child survival? Analysis showed that health interventions accounted for 80 percent of the net improvement in child mortality; the remaining 20 percent was due to a reduction in high-risk births.

This analysis shows that family planning programs have substantial benefits for infant

[3] The FamPlan model was developed by Dennis Chao, Jim Tarvid, and Mary St. John, Research Triangle Institute, under the USAID-sponsored project Resources for the Awareness of Population Impacts on Development (RAPID).

Table 5. Influence of Tunisian Family Planning Program on Percentage of High-Risk Births

	Percentage of High-Risk Births		
Year	Without Family Planning	With Family Planning	Percentage Change
1970	42	41	2
1980	38	34	11
1990	34	26	24

health. Family planning, in addition to its main role in reducing fertility, is an important tool for improving infant and child health and reducing infant deaths, and thus is essential to improving child survival.

This analysis, however, underestimates the impact on health in at least two ways. First, it looks only at infant mortality, and does not consider the effects of spacing on the preceding child (who is also more likely to survive when births are spaced) or the mother. Second, it does not examine cost: 1992 data from Honduras indicate that the average cost of medical care for a birth with complications, which is more common when the birth interval is less than two years, is more than twice as much as a normal birth (US$192 vs. $78).

Finally, trends in high-risk births are sometimes not closely monitored by USAID or the host government. It is difficult to track trends in high-risk births using published survey data; for Kenya and Tunisia, CDIE teams requested special analyses of the Demographic and Health Survey data. In the Philippines, data were unavailable on fertility reduction in the single most important category—short intervals between births.

Women's Health: Abortion in Tunisia

The availability of effective contraceptives in Tunisia—principally sterilization and the IUD—has contributed to a reduction in abortions, thus enhancing women's health and well-being. Although public sector physicians perform abortions in Tunisia under safe medical conditions, all abortions pose risks, especially when women have repeated abortions. Tunisian researchers have shown that repeated abortions result in a higher subsequent risk of ectopic pregnancy and premature rupture of the membranes.

In Tunisia, the number of abortions performed per year has remained relatively constant for the past decade, averaging 21,000, while the number of married women of reproductive age has increased by more than 50 percent. During 1988 and 1989 (the latest years for which data were available), abortions in public sector facilities declined by 9.35 percent. By reducing the risk of unwanted pregnancies, family planning has reduced the incidence of a wide range of health risks for

Table 6. Effects of Family Planning on Social Service Expenditures

		Cumulative Savings (1991 $US, in thousands)			
Country	**Period**	**Health**	**Education**	**Others**	**Total**
Kenya	1980–2000	91,147	282,389	—	373,537
Pakistan	1972–1992	65,563	456,592	—	522,155
Philippines	1970–1991	334,222	2,269,107	524,060	3,127,389
Tunisia	1966–1991	339,782	598,724	162,724	1,101,258
Total					5,124,339

Note: Analyses for Ghana and Honduras were not undertaken.

women, reduced maternal mortality and morbidity, and contributed to a reduction in the expenditure of scarce health resources.

Impact on Government Social Services Expenditures

Government expenditures on social services (public health, education, housing, and others) depend on population size. The larger the population, the greater the demand for these services and the higher government expenditures.

CDIE used the FamPlan model to calculate total savings in government expenditures attributable to the family planning program in four of the case study countries. The estimated cumulative savings in health, education, and other social service sectors attributable to family planning programs over 20 to 30 years exceeded $5 billion (see table 6). As one might expect, where the family planning program was most successful—Tunisia—the per capita reduction in government expenditures was by far the greatest.

Data from these four countries show that family planning programs reduced the resources needed to maintain the quality of services at existing levels. These savings can be viewed as resources that might have been used for improving social services or reaching targets in these sectors earlier. By reducing government budget burdens, family planning programs are valuable to governments trying to improve quality of services while containing costs. The recommendation related to these conclusions is in chapter 5.

Impact on the Household

Data were only available from Pakistan on how family planning affected the household. The data at the household level from this one country show the socioeconomic benefits for families that are successful in limiting fertility. These benefits give some indication of the favorable consequences for national development.

In low-fertility households, 1) children's school attendance was higher, for girls as well as boys; 2) per capita income was higher and

dropped with each additional child; and 3) savings were higher. In urban and rural households, children reduced savings by 3 percent to 40 percent per month. In rural households, contrary to conventional wisdom, these losses were never recouped, even after the children left the household.

These data suggest that the failure of the Pakistan family planning program to contribute to fertility decline over a 25-year period has had negative consequences for millions of households and for national economic development.

What Results Are Attributable to USAID?

Any analysis of USAID's contribution to family planning will be imprecise. Recognizing the difficulties involved, CDIE teams examined the extent of USAID's support for particular program components or methods and sought evidence of results in these specific areas. USAID monitoring systems do not always document precisely USAID's planned and actual contribution at various levels of programming. The perennial problems related to lack of data (for example, investments by USAID compared with other donors) substantially hindered teams' efforts to analyze attribution.

The impact of USAID assistance can be summarized as follows:

1. In all six countries, even where contraceptive prevalence and demand for family planning remained relatively low (Pakistan and Ghana[4]), USAID-supported programs—or program components—substantially increased contraceptive use (see box 1, page viii). This matrix documents specific links between USAID's work and results, defined either by outputs—which have increased access and availability—or by increased use of contraceptives. For most of these programs, USAID was the sole or primary donor. In countries such as Honduras and Tunisia, where family planning was more successful, the magnitude of USAID influence was commensurately greater.

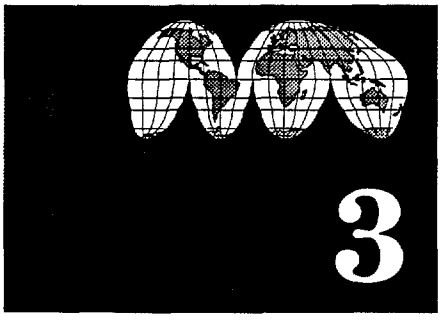
2. USAID was the principal donor to the national family planning program in each country, contributing from 40 percent to 60 percent of all family planning resources over a 20-year interval.

3. The most frequently used contraceptive methods were ones substantially supported by USAID—principally female sterilization, pills, and IUDs. They account for 92 percent to 96 percent of the modern methods used in three of the countries.

While Pakistan and Ghana did not experience as much demographic or health improvement, USAID contributed to changes there that are precursors to fertility decline. In Ghana, USAID-supported interventions increased knowledge of family planning. In Pakistan, USAID developed institutional capacity in logistics, research, evaluation, and voluntary sterilization.

In addition to lack of demand for family planning in Ghana and Pakistan, the governments' lack of interest and the interruption of USAID assistance (twice in Pakistan and once for a five-year period in Ghana from the early- to mid-1980s) hindered the family planning effort. In addition, Pakistan had serious USAID program design deficiencies. These included inadequate consideration of evaluation findings and cultural issues in program design, and insufficient USAID staff to monitor program implementation.

[4] By 1993, demand for family planning in Ghana had increased to 59 percent, including met and unmet demand.



3 Fertility Decline: Nonprogram Factors

IN THE 1960S, the six CDIE case study countries—like virtually all developing countries at that time—had similar fertility rates of 6 or more children. (Kenya's level of 8.12 was exceptionally high.) By 1990, substantial changes in fertility had occurred in some of the countries—but not in others. What accounts for these differences?

Scholars and program managers have long recognized that a complex array of cultural, political, and socioeconomic factors influence fertility, independent of any planned program effort. These include socioeconomic development, modernization, education, women's status, men's attitudes toward family planning, religious and ethnic affiliation, and the costs and benefits of children. CDIE's assessment confirms the importance of these factors and concentrates on four: the attitude of national leaders toward family planning, the social and cultural context, the status of women, and the urban–rural dimension. It also identifies strategies that USAID and host country managers can adopt to address these factors and enhance the likelihood of program success.

Attitude of National Leaders

For more than 20 years, the development community has acknowledged that the attitude of national leaders is a critical determinant of program success. The six case studies confirm this finding. As early as 1956, Prime Minister Habib Bourguiba of Tunisia championed women's rights, abolished polygamy, legalized abortion, established women's equality within a secular legal framework, and, as did other leaders, openly and consistently advocated for womens' right to use contraceptives. In the Philippines, President Ferdinand Marcos was an early and avid supporter of family planning. In Kenya, the turning point occurred in 1984 when President Daniel arap Moi, in addressing a national population conference, spoke forcefully of the need to expand family planning and urged all national and local leaders to support the program actively. During the years of open, dynamic, and consistent high-level support, these countries made rapid advances in family planning.

Conversely, lukewarm or negative attitudes of government leaders proved a severe constraint to program success. All case study countries except Tunisia have confronted this difficulty. In Honduras, and the Philippines after 1982, the governments backed away from overt program support after Roman Catholic leaders denounced family planning activities. Until 1984, neither Ghana nor Kenya enjoyed a national consensus on the priority of family planning in socioeconomic development. And Pakistan, confronted with fundamentalists' insistent demands for stricter adherence to Islamic

codes, avoided close identification with program goals until 1992.

The case studies thus suggest that vigorous government support may be the exception rather than the rule. When government commitment is weak, what steps might managers take? In those situations in the case study countries, USAID employed a range of strategies that resulted in measurable achievements. This occurred in Honduras in the 1970s and 1980s, in Kenya prior to 1984, in the Philippines after 1986, and to some extent, in Ghana and Pakistan, as shown in box 2, page 23. Careful programming can sometimes partially overcome lack of government commitment (see figure 3, page 26, and figure 4, page 27).

Cultural and Religious Factors

In all six countries, traditional cultural and religious beliefs—whether Muslim, Roman Catholic, or animist—have been constraints to acceptance of family planning. The religious beliefs, cultural mores, and established values in the six countries are diverse. Yet the traditional cultures—whether Sub-Saharan or North African, Latin American or Asian—manifest common themes. Men are the major decision-makers; women have little power, education, or status; large families are favored and are viewed by women, and frequently men, as the only route to enhancing status; religious questions about modern contraceptive methods prevail; and children, especially income-earning sons, are viewed as old-age insurance. In Pakistan, the practice of purdah—female seclusion, in which women are permitted contact only with male relatives and rarely leave the family compound—makes women's access to family planning providers a severe challenge. In Ghana, men believe that a man is successful when he has 10 children and that family planning allows women to have relations with other men. In Tunisia, many men and women view sterilization as a sin.

Despite the powerful influence of traditional culture, the case studies demonstrate that family planning programs can achieve goals consistent with modernizing societies if their design and implementation are compatible with the prevailing culture and sensitive to local values. In most instances, USAID supported carefully designed, "culturally appropriate" family planning programs in the case study countries. In some instances, USAID managers neglected the cultural dimension and programs achieved less.

In Pakistan, USAID implemented a social marketing program making condoms widely available in locales frequented by men, such as pharmacies. And when USAID managers observed that the Pakistani rural culture appeared closed to modernizing influences, they developed an operations research project to help managers understand village life and cultural beliefs. This project appears to have been a thoughtful response in a culturally challenging environment. Unfortunately the project was not implemented.

Based on empirical data showing that rural communities in Ghana value the views of traditional birth attendants, USAID trained and supplied these groups with contraceptives for distribution in the villages.

These and other examples are presented in box 3, page 24, and box 4, page 25.

The case studies also reveal that traditional values do not always influence behavior in expected ways. In the Philippines, for example, the Catholic Church's influence was not as strong as assumed. Survey data showed that Catholic women of all age groups reported higher contraceptive use than women in all other religions combined. Other studies found no correlation between the Catholic faith and use of the rhythm method. Data also showed that 80 percent of surveyed Catholics expressed satisfaction with the government family planning program. These findings are consistent with surveys in other Catholic countries. In Pakistan and Tunisia, Islamic coun-

tries in which some devout Muslims consider sterilization a sin, female sterilization is the first and second most favored method, respectively. In view of these findings, the case studies underscore the importance of questioning explanations of poor program performance that rely principally on cultural and religious factors.

Status of Women

Women's status as it relates to fertility is important for public policy decisions. Policymakers are increasingly called on to provide greater support for programs that enhance women's status as a more practical, humane, and ethical way to affect birth rates, than for programs that distribute contraceptives and provide family planning education. Some fear, however, that broadening population goals to support women's status will divert resources from the immediate objectives of reducing fertility. This CDIE assessment cannot definitively address this issue. However, although the study examines only three aspects of women's status—education, labor force participation, and the legislative environment—the findings provide a measure of guidance.

In many instances, the CDIE assessment confirms the relationship between women's status and fertility, especially with respect to female education. It found that

- Female education is a powerful predictor of contraceptive use. In all countries except Tunisia, contraceptive use was at least double in the more educated group than in the uneducated group.
- Labor force participation encourages contraceptive use. The Kenya team concluded that women's access to jobs and cash earnings brought an awareness of options other than motherhood.
- Progressive legislation enhances and regressive legislation undermines acceptance of family planning. Prime Minister Bourguiba's early and unprecedented reforms in Tunisia in the 1950s advancing women's rights undoubtedly supported women's growing independence in reproductive decisions. In Pakistan, by contrast, the trend towards increasingly conservative Islamic culture of the 1980s and the more restrictive legal code appeared to undermine women's tendencies toward independent decision-making on contraceptive use. These findings are consistent with previous research on these topics.

The case studies also called attention to instances in which women's status did not appear to influence fertility as expected. In Tunisia, as late as 1988, almost 60 percent of women had no formal education (Aloui et al. 1989). *Yet Tunisia had substantially higher levels of contraceptive use than would be expected* (Cochrane and Guilkey 1991). This may be attributable to an effective program that appears to have targeted services to the less educated: from 1978 to 1988, fertility declined in Tunisia by almost identical percentages among those with no schooling and those with more than primary school (from 7.3 to 5.1 and from 5.4 to 3.9). Moreover, the least-educated Tunisian women were more likely than the more educated to use modern contraceptive methods (Cochrane and Guilkey 1991).

The CDIE team concluded that although women's status was somewhat higher in Tunisia than in other Muslim countries, especially because of progressive legislation, women's status was not a wholly satisfactory explanation for the significant fertility decline in Tunisia. For instance, low levels of education made it difficult for many Tunisian women to know about and take advantage of progressive laws. Relatively high levels of contraceptive use among women with no formal education were also achieved in Honduras.

Conversely, in the Philippines, women's educational levels are relatively high. In the 1980s, 83 percent of women were literate, the highest rate of the CDIE case study countries. Statistics on Philippine women's status equal

those of developed countries for all indicators except maternal health and life expectancy. However, use of reversible contraceptive methods did not change in 15 years, and the population growth rate has remained one of the highest in Asia. In Pakistan and Tunisia, researchers found little or no relation between work and fertility.

These findings underscore the importance of understanding women's status and its relation to fertility within the country context.

Urban–Rural Dimension

In most countries, contraceptive use is substantially lower in rural than urban areas. The case studies were consistent with these trends. In the Philippines, for example, 26 percent of urban women and 18 percent of rural women used contraceptives. In Honduras the difference was even greater: 49 percent versus 24 percent. And urban Pakistani women were more than five times as likely to use contraceptives as rural women.

Given the above, the CDIE assessment found, surprisingly, that only one of the six countries—Tunisia—used mobile clinics and mobile teams to bring information and services to rural areas. Yet lessons related to mobile strategies have been available for the past decade.

The Thai program has used a mobile strategy since 1975. It has long been recognized as one of the critical factors in the program's success (Bennett et al. 1990). In fact, the Thai program used a whole range of mobile strategies, despite the fact that "Thailand is one of the least likely settings for a wide network of mobile units" (Bennett et al. 1990).

In some regions, such as sub-Saharan Africa, high transport and logistics costs together with lower contraceptive prevalence raise questions about the cost-effectiveness of a mobile-team strategy. Alternative strategies employing rural-based distribution workers, or establishing rural dispensaries, may prove more cost-effective. Operations research is needed to determine the most appropriate country or regional strategies.

Aspects of the Tunisia mobile clinics and teams are discussed in chapter 4. Learning the lessons of mobile strategies is critical for reducing urban-rural disparities in contraceptive use.

Box 2. Alternative Strategies for Managers Confronted with Lack of Support

Problem	Strategy	Comments
Public support lukewarm due to religious opposition	Shift USAID funding to the nonprofit private sector	In Honduras in the 1980s, USAID allocated funds to a private, nonprofit family services program, ASHONPLAFA, which now provides 50–70 percent of family planning services and has become a leader in family planning service delivery.
Public sector unwilling to invest	Shift USAID funding to for-profit and nonprofit private sector	In Kenya in the 1970s, USAID started a project to provide family planning services at private sector organizations (businesses, workplaces, schools). The private sector now accounts for 10–13 percent of contraceptive use in Kenya.
Family planning a low priority	Train and supply private sector individuals	In 1985, USAID trained 3,000 private sector traditional birth attendants to provide family planning services throughout Ghana.
Public support lukewarm due to opposition to family planning	Integrate with maternal/child health programs; emphasize health rationale	From 1986 to 1990, USAID designed an integrated family planning/maternal and child health program that the Department of Health could accept because of its health rationale.
Public sector support lukewarm due to opposition to family planning	Emphasize goals with broader support: enhancing family welfare, maternal and child health; reducing unwanted and high-risk births.	In Honduras in 1990, a maternal mortality study showed shockingly high maternal death rates. This mobilized previously uninterested health officials to accept and increase support for family planning to improve maternal and child health. There is broader support for this "reproductive risk" strategy.
No government support because it does not believe there is a problem	Gather data on problem and present to government	In 1973 in the Philippines, a USAID analysis showed 70 percent of the people lived in rural areas, but most clinics were in towns. A third of eligible couples within 3 kilometers of clinics were regular users. Use declined sharply for those who lived farther away. This led to the Outreach project, the only one that increased contraceptive use in the Philippines.
Public sector family planning activities move too slowly	Target individuals, regions, and offices where support and action are forthcoming	In Honduras, USAID grew impatient with the pace of activities, but found confronting Ministry of Health counterparts counterproductive. Instead, it worked with committed individuals and units in the ministry. When the project manager found a supportive regional office, it became a focal point for USAID activities and resources.
Lack of government interest; weak management capabilities	Shift from financing inputs to financing results	In late 1985 in Pakistan, senior USAID technical advisers recommended a shift to financing *performance* and identifying output measures reflecting "access" or "availability" against which disbursement of funds would be set.*

Box 3. Culturally Appropriate Family Planning Strategies for USAID

- *If there is opposition to modern contraceptive methods, focus on eliminating high-risk births and include education about natural family planning.* High maternal mortality in Honduras motivated previously uninterested Ministry of Health officials to support family planning. The reproductive risk approach fits cultural, religious, and political norms. In the case study countries, information about natural family planning—breast-feeding, rhythm, abstinence—was included in information and counseling services because some potential clients, while not opposed to family planning per se, were opposed to modern methods for religious reasons.
- *Use traditional health providers in rural communities.* In Ghana, USAID provided services through traditional birth attendants, appropriate in a culture that values traditional healers' views.
- *Target men in male-dominated cultures.* USAID's contraceptive social marketing project in Pakistan was appropriate in a culture where many women are in seclusion *(purdah)* and do not have access to health providers. Men have a dominant role in family decision-making, and they have access to pharmacies throughout the country where condoms can be sold.
- *Employ women to counsel and provide services to women.* In Kenya, where family planning providers were chiefly women, women were more willing to ask about, adopt, and continue to use family planning. In Tunisia, female clients trust the *sage-femme* (midwife).
- *Initiate pilot programs and operations research to determine what works.* In Pakistan in 1976, the USAID Mission recognized the considerable cultural constraints to acceptance of family planning. It planned but did not implement an operations research project to determine which approaches would be the most culturally acceptable and effective.
- *Train male health providers in culturally appropriate service delivery.* As Tunisia integrates family planning into health services, many male nurses from the health system will be available to provide family planning. In Tunisia, however, it would be culturally inappropriate for males to provide IUDs, the second most favored method. Instead, they will be trained to provide injectable contraceptives.

Box 4. Culturally Inappropriate Family Planning Strategies for USAID

- *Using mass media exclusively without first examining alternatives.* In 1986, USAID/Pakistan budgeted $5.6 million for a mass media education program. Yet survey data showed that 47 percent of the populace did not own any electronic media, and the most important educational medium for adoption of family planning was interpersonal communication. A 1976 USAID evaluation in Pakistan stated that neglecting interpersonal communication "wastes resources."
- *Providing methods without first assessing client preferences.* In the Philippines, USAID may have spent disproportionate resources supplying methods—pills, condoms, and IUDs—that appealed to only a small fraction of Filipino couples. Use of these methods remained at about 10 percent for more than 15 years. Sterilization and rhythm were the only methods to show evidence of increasing use and demand.
- *Emphasizing contraceptive supply when cultural beliefs inhibit demand.* An important element of USAID assistance to Pakistan in the 1970s was the "inundation scheme." Advocates at USAID mistakenly assumed that inundating Pakistan with a wealth of contraceptive commodities would generate demand.

Figure 3. Family Planning Strategies in Adverse Policy Environments

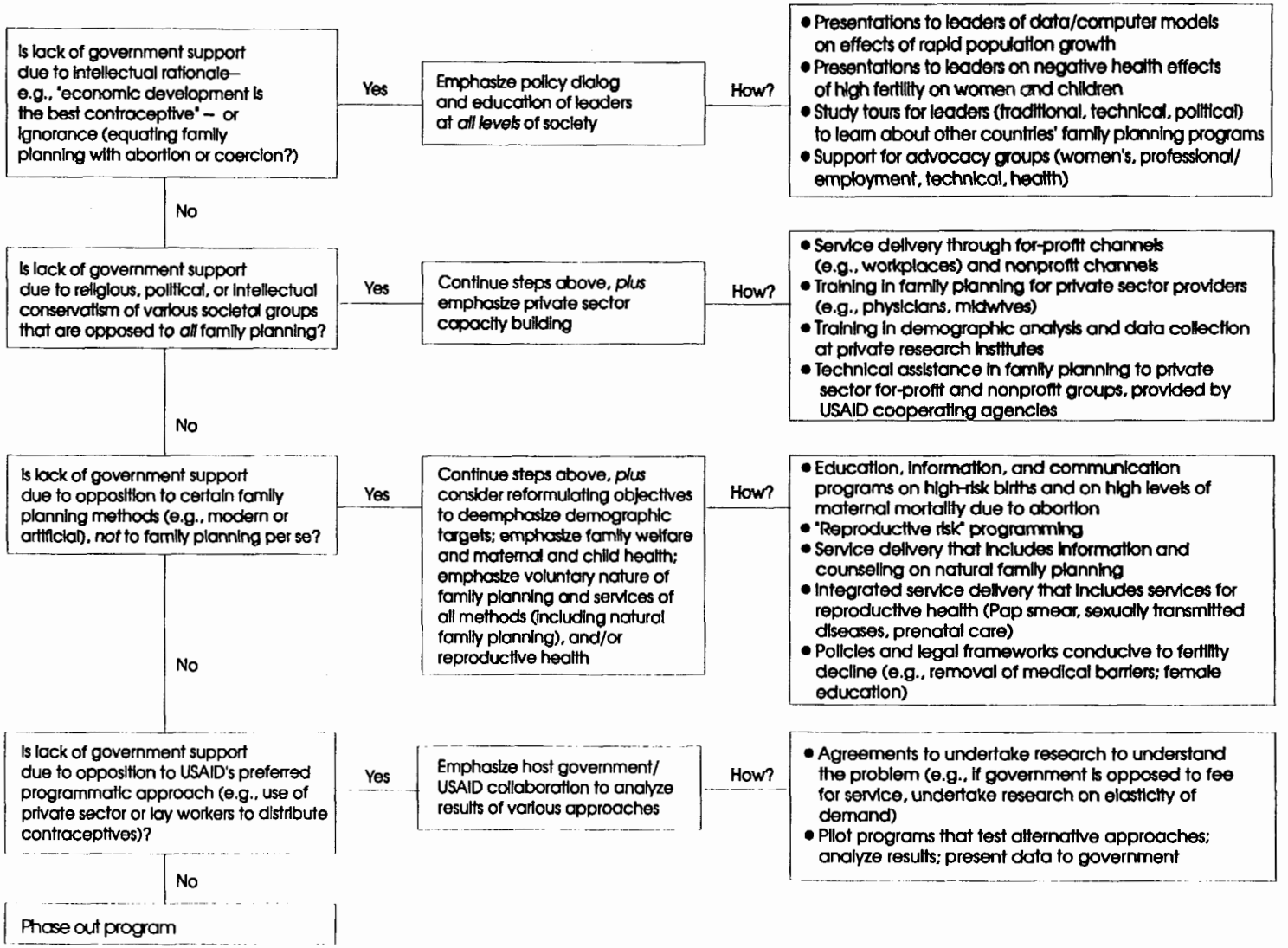
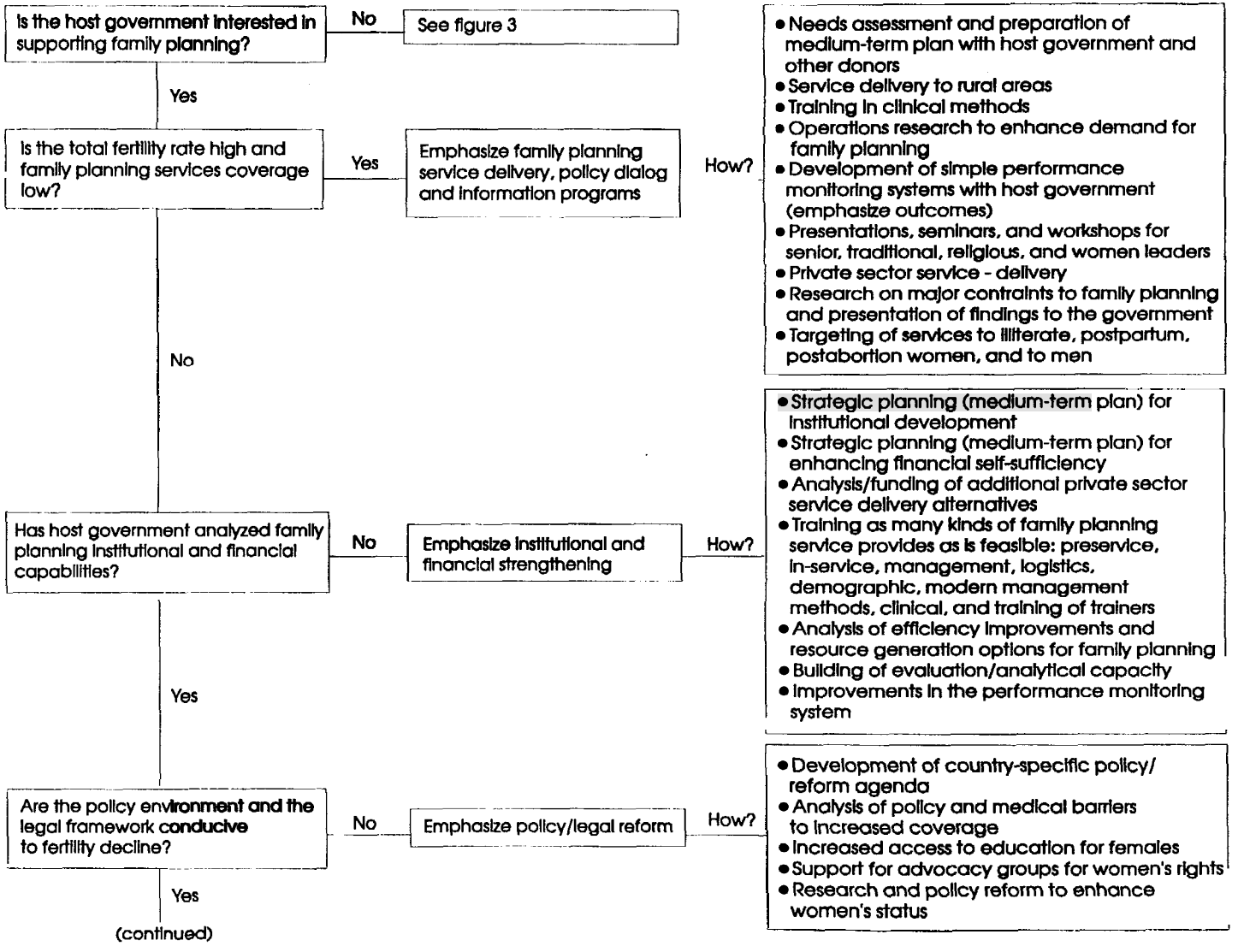
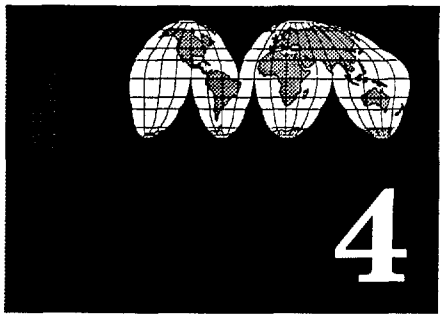


Figure 4. Family Planning Strategies in Lukewarm or Positive Policy Environments





4 Family Planning Programs and Fertility Decline

THIS SECTION examines family planning strategies that increased contraceptive use in the six countries. Most family planning programs increase contraceptive use by providing contraceptives (such as pills, IUDs, and male and female sterilization); contraceptive services (such as IUD insertions); and education about family planning. Programs use the following strategies:

- Increasing accessibility and availability of contraceptives
- Enhancing service-delivery capabilities of public and private sector channels (nonprofit and for-profit)
- Training family planning service providers and managers
- Improving quality of care in service delivery
- Developing outreach programs (sometimes called community-based distribution programs) to bring services and information to local communities and work places, frequently by using health service providers or lay workers
- Developing information, education, and communication strategies about health and family welfare benefits of family planning
- Maintaining statistics on services provided
- Conducting operations research and evaluating their own program

To be effective, prominent family planning researchers observe, family planning programs must do "many things well" (Lapham and Mauldin 1985). How well the six national family planning programs carried out this range of program activities accounts, in part, for the programs' success in increasing contraceptive use.

The CDIE assessment reveals a wide variation in program performance. Tunisia was clearly the strongest performer. Program performance in Honduras, Kenya, and the Philippines might be labeled mixed, modest, and improving, respectively. Ghana's and Pakistan's performance were weak.[5]

[5] This study was conducted at a low point in Ghana's family-planning program. The program turned around when funding resumed after a considerable hiatus. The combination of national will and donor support produced dramatic results by the mid-1990s.

This chapter addresses the following questions:

- What program strategies account for the variation in performance?
- What strategies distinguish the approach of the Tunisia program?
- Which USAID-supported strategies were the most successful and merit replication or expansion?
- What innovative contributions has USAID made to family planning?
- Which USAID-supported approaches need to be improved?

Program Strategies and Variation in Performance

The strategies employed by the stronger performers will come as no surprise to the technical experts. Yet they affirm what still needs to be accomplished by poor performers, as well as what can be achieved in adverse environments by creative management. The stronger performers increased provider and service coverage, responded to clients' needs, and made decisions based on data.

Coverage of Providers and Services

As documented in table 7 on page 39, the distinguishing feature of programs in Honduras, Kenya, the Philippines, and Tunisia is their success in covering urban and rural populations with family planning providers, services, and service outlets. They trained more physicians and service providers; established more delivery channels; educated more couples; and generally made modern, effective contraceptives more accessible and available to the majority of the populace. Research shows that as contraceptives that meet clients' needs become increasingly accessible and available,[6] contraceptive use increases.

In Ghana, by contrast, the program during this time period did not have well-developed outreach activities. Deteriorating economic conditions contributed to a skewed distribution of personnel and contraceptives to urban areas, where only about 30 percent of the population lived. In Pakistan, the ratio of service outlets to population in rural and urban areas actually decreased over the years. Even in the mid-1980s, services were inaccessible for most of the population: in Baluchistan, clients had to walk more than 47 kilometers to reach a service outlet.

Despite adverse policy environments, especially in Ghana, Honduras, and Pakistan, USAID contributed to coverage in all six countries.

Response to Clients' Needs

It is widely known that good managers respond to client needs. The six case studies demonstrate that managing family planning programs is no exception. In Tunisia, managers believed the IUD best suited the needs of rural, uneducated clients—no discipline is required on the part of the user, there is no need for resupply, and it is well suited to a delivery system centered on the midwife (who, in Tunisia, is trained in IUD insertions). By 1988, IUDs were the most used method and accounted for more than 45 percent of the increase in use between 1978 and 1988. By contrast, the Philippines devoted disproportionate resources supplying methods—pills, condoms, and IUDs—that appealed to only a small fraction of Filipino couples. Data suggest that they prefer sterilization. The Pakistan program, throughout the 1970s and 1980s, clung to the "inundation scheme." This approach—introduced by USAID—was based on supply-

[6] Accessibility and availability are defined in terms of ready and easy access, meaning that clients spend no more than an average of 2 hours per month to obtain contraceptive supplies and services and that the cost is not burdensome.

ing enormous quantities of contraceptives with minimal effort to determine the demand side of the equation. USAID evaluations documented that lack of effort to assess clients' needs had serious, negative repercussions for the performance of the Pakistan program.

Decisions Based on Data

Managers in the better performing countries tended to make decisions based on data. In some circumstances, these decisions represented critical and positive turning points for family planning.

In Tunisia, when a 1979 USAID evaluation documented a "plateauing" of new users, the government agreed with USAID that a new strategy was called for to reach rural areas. Tunisia's most dramatic fertility decline occurred from 1980 to 1988. Analysis shows that the decline in fertility in the 1980s is attributable to increased contraceptive use, rather than to later marriage or other factors.

In Honduras, data also galvanized decisionmakers to change policy, with significant and positive implications for family planning. A 1990 study found the maternal mortality ratio was an alarming 211 per 100,000 live births—four times higher than the official figure. Overnight, reducing maternal mortality became a national priority. Family planning to reduce high-risk births acquired a new currency in the Ministry of Health. For the first time, there appeared to be a growing consensus that family planning to reduce high-risk births was justified and needed in Honduras.

In Kenya, the 1979 census showed an increase in the annual population growth rate to almost 4 percent, the highest in the world. This moved Kenyan officials to focus on the problem of rapid population growth and contributed to the government's first active and forceful steps to support a now highly credible family planning program.

In Pakistan, by contrast, USAID introduced the inundation scheme in 1974 without prior analysis. In 1976, the GAO observed that no evaluation or market study of the potential effects of inundating Pakistan with $20.6 million in contraceptive commodities had been undertaken before the funds were committed. It was merely assumed that increased supply would generate demand. A 1976 USAID evaluation, in criticizing the inundation approach, recommended that USAID undertake research to understand more fully the dynamics of village life and culture. USAID/Pakistan developed a research project that responded to this recommendation. In 1981, however, when U.S. assistance recommenced after a two-year hiatus, USAID/Washington approved another population assistance package based on the massive supply of contraceptive commodities. The USAID/Pakistan operations research project, which aimed to gather data in rural areas to determine demand and client needs, was never implemented.

One highly knowledgeable observer commented, "Repeating the inundation scheme in the 1980s was our biggest mistake" (Schmeding et al. 1993).

Program Strategies Unique to Tunisia

Tunisia used a range of strategies to increase contraceptive use that distinguishes its program from the other five case study countries. The other countries either did not use or only partially used these strategies.

Performance Monitoring and Evaluation

The Tunisia program maintained an impressive system for collecting and analyzing service statistics. Beginning in 1984, Tunisian managers worked with the 23 administrative areas *(governorates)* to develop regional plans with clear objectives. Program managers analyzed achievement of objectives annually, based on service statistics gathered in each

area. The Tunisia program's 1989 annual report provided persuasive evidence of the program's analytical capacity. It included a detailed analysis of the goals achieved by each governorate in 1989 compared with 1988.

Research has shown that programs with effective monitoring and evaluation systems have higher levels of contraceptive use (Ross et al. 1989). None of the other CDIE case studies reported evidence of a strong performance monitoring and evaluation capability. USAID evaluations repeatedly commented on evaluation deficiencies in the Philippines and Pakistan programs.

Mobile Units

USAID-supported mobile clinics and teams provided services in rural Tunisia as early as 1968. In the late 1970s, when data showed that contraceptive use was not increasing, especially in rural areas, USAID substantially increased funding to strengthen and expand the mobile units. By 1990, the program supported 67 mobile teams that brought services to 800 small public health facilities and 10 mobile clinics that brought services to other remote areas. Between 1982 and 1985, the number of new users through the mobile units increased by 54 percent, and the units were producing one third of the output of the entire family planning program. In some governorates, they contributed as much as 74 percent of the program output (Coeytaux et al. 1989). None of the other case study countries used mobile units.

Interpersonal Counseling

Beginning in 1982, with substantial USAID support, the Tunisian program developed a highly effective information, education, and communication component to provide interpersonal counseling through family planning educators called *animatrices*. The number of individual contacts between animatrices and clients rose from 28,000 to 97,000 from 1981 to 1983. A USAID-funded operations research study showed that adding an animatrice to a mobile team increased the number of new users by 125 percent, compared with the control region. As documented in table 7 on page 39, none of the other CDIE case study countries had such an extensive or effective communication program. In fact, the communications programs in Honduras, Pakistan, Ghana (until 1985), and the Philippines (after 1982) were considered weak.

Training

Training represented the heart of USAID assistance to the Tunisian program. USAID funded training that supported every phase of the Tunisian program, including training many types of providers—preservice, in-service, and clinical (especially in providing effective modern methods such as female sterilization and IUD insertions)—as well as training of managers and trainers. In 1982, Tunisia distinguished its training effort from the other five countries by instituting an unprecedented policy: management training would focus less on technical family planning knowledge and more on problem identification, data analysis, and problem-solving.[7]

[7] A major 1992 study of management practices that influence performance found that "training in problem-solving" was characteristic of less than 20 percent of poor managers and nearly 100 percent of good managers, and that traditional bureaucracies usually train primarily to enhance technical knowledge. (See *International Quality Study Best Practices Report: An Analysis of Management Practices That Impact on Performance* 1992, 11.)

The CDIE team observed strong, positive evidence of the results of the problem-solving approach during interviews with regional managers. The walls of the managers' work places were covered with charts and graphs that they and their staffs had prepared. These materials documented clinic conditions and service outlet and clinic trends.

By 1990, Tunisia had developed the institutional capacity to train its own people as well as professionals from other countries at its international training center. Most important, Tunisian managers thought strategically about program objectives (such as the need for strong regional managers, the emphasis on clinical methods) and developed a training program to support those objectives. None of the other country case studies provided evidence of such an extensive, in-depth, or institutionalized training effort.

USAID Strategies That Merit Support

The case studies document several strategies USAID employed that merit continued or increased support.

Bringing Data to Policymakers

USAID's launching of the Demographic and Health Survey has been a landmark contribution to demographic analysis and family planning. The Agency's use of such data in policy dialog has had, in many instances, a profoundly positive influence on program design and direction (see box 1, page viii). The case studies documented many successful examples of USAID's use of data to influence host government decision-making and change policy.

- *Tunisia.* Data from a 1979 USAID evaluation showed a "plateauing" of new users. At the urging of USAID, the government agreed to refocus the program on rural areas.
- *Kenya.* Survey data showed that Kenya had the highest population growth rate in the world. At the urging of USAID, the government agreed to strengthen the program effort.
- *Philippines.* USAID data from 1977 showed the stationary clinic strategy was ineffective. USAID urged establishment of a community-based distribution program through the Outreach project—the only project in that country that had a statistically significant impact on contraceptive use.
- *Ghana and Pakistan.* USAID-funded research helped demonstrate the feasibility of integrating family planning into health care and convince policymakers to move toward service integration.
- *Honduras.* The CDIE team observed policy dialog moving at an agonizingly slow pace. As it turned out, the maternal mortality study—funded by another agency—did mobilize Ministry of Health interest in and commitment to a "reproductive risk" strategy in family planning. Yet the CDIE team ended its report with several questions: What kind of policy dialog works? What more could USAID have done to produce a policy breakthrough in Honduras?

After data are gathered and analyzed, it's important to analyze the policy implications of the findings and review them with the host government.[8] A brief example, as well as some suggestions for using data to promote policy dialog, are included in box 5, page 43.

Though the Demographic and Health Survey and other surveys are important for policy change and program development, they provide

[8] A recent review of USAID Mission strategic plans indicated that very few Missions monitored achievement of policy change systematically, especially in the social sectors (see *Performance Measurement for Strategic Management* 1992).

information principally on macrolevel societal conditions and demographic trends (such as fertility and contraceptive use). Information is also needed on intermediate outcomes related to program performance.

Risk-Taking and Innovation: Going Against the Grain

USAID's reputation for risk-taking and bold, pioneering innovations in family planning is strongly confirmed by the six CDIE case studies. USAID experimented with and mobilized an international consensus for a variety of previously untried delivery channels for providing contraceptive services, despite initial skepticism among experts. For example, USAID's contraceptive social marketing program in Pakistan was considered a major policy breakthrough by most observers. USAID also supported technical advances and modern methods that conventional wisdom considered unlikely to succeed in traditional environments.

The CDIE assessment supports a key conclusion of a recent report: "Virtually every major innovation in the population and family planning field can be directly or indirectly linked to USAID support; in contrast, few important innovations, if any, are associated with other donors" (Conly et al. 1991). Successful innovative approaches include those in the sections that follow.

Community-Based Distribution

In the 1960s and 1970s, USAID operations research worldwide (including Tunisia and the Philippines) showed that clinic-based systems were inadequate to serve dispersed and isolated rural populations. The research showed that with training, service providers and lay workers (paid and volunteer) could successfully dispense pills, condoms, and spermicides. These programs have now become central to many successful programs supported by USAID. (Nevertheless, full clinics remain important given the need to provide long-term contraceptive methods, such as sterilizations and IUDs.) Box 6, on page 44, gives examples of successful community-based distribution programs found in the CDIE case study countries.

Contraceptive Social Marketing

Among all donors, USAID has been the principal supporter of contraceptive social marketing programs. The approach has been implemented in 30 countries in the past 25 years and is being implemented in five of the six CDIE case study countries.

Contraceptive social marketing programs are usually implemented through public–private sector partnerships. The purpose is to increase the purchase of contraceptives by lower- and middle-income populations and to shift the cost of family planning programs increasingly to the private sector. Setting up social marketing programs usually involves establishing a public or private sector implementing agency (or a combination of these); developing its commercial marketing and management skills; selling low-cost, usually subsidized, contraceptives through commercial distribution and retail outlets.

The programs contributed to contraceptive use in four of the countries. Indeed, in Pakistan, where the government opposed public information campaigns and advertising contraceptives, the social marketing activity was a singular accomplishment. However, the Philippines' total rejection of social marketing, until very recently, was considered by the CDIE team to be a major failure. Kenya began its program in 1991.

One major USAID innovation has been increasing the involvement of the for-profit private sector in family planning. USAID has worked to have family planning added to existing health services offered by for-profit companies, nursing homes, and religious and educational institutions. Kenya was the first

country (in 1984) to launch a bilateral project to provide family planning services through the commercial private sector. (Note: for a discussion of the commercial private sector, see chapter 6.)

Use of Technical Advances

In 1977, USAID introduced in Tunisia what was then considered a revolutionary surgical technique—laparoscopy—for female sterilization. Its advantage was that it could be used for nonpostpartum women, allowing access to services by a much larger group. (Subsequently, minilaparotomy has been introduced for sterilizing nonpostpartum women in many settings where the resources for laparoscopy are not available.) By 1988, female sterilization was the second most used method in Tunisia and accounted for 25 percent of the increase in contraceptive prevalence between 1978 and 1988.

Similarly, in Kenya, USAID has been the sole donor for what most observers perceive as a groundbreaking component of the Kenyan program: female sterilization. A number of observers thought sterilization would be unpopular in sub-Saharan Africa: Africans might adopt modern child-spacing measures for health purposes but would never voluntarily end their fertility. Female sterilization in Kenya now ranks just behind oral contraceptives as the most popular method of modern contraception, and the Kenyan voluntary surgical contraception program has become a model for Africa.

The case studies document the strides USAID has made through its attention to innovation.

Shortcomings: Areas for Increased USAID Attention

Male Contraceptive Methods and Motivation Strategies

USAID and the leadership of the national family planning programs gave insufficient attention to men's roles in family planning in the six case study countries. Condom use ranged from 0.3 percent in Ghana to a high of 2.7 percent in Pakistan. Male sterilization was negligible.

The six USAID programs focused on providing "women's methods"—pills, IUDs, injections, and female sterilization—none of which requires men's active participation.

Despite men's passive stance, researchers are increasingly finding that men's uninvolvement is due neither to lack of interest nor to unwillingness to assume greater responsibility for contraception, but to lack of information. Focus group research in Tunisia and Pakistan, for example, indicated that in both countries, vasectomy was completely misunderstood, and was equated with impotence and castration. In commenting on lessons learned from Tunisia, one senior Tunisian manager observed that failure to educate and provide services for men right from the start was "one of our most important lessons" (Rea et al. 1993).

Vasectomy is simpler, safer, and less expensive than female surgical contraception and is comparable in effectiveness. A USAID-funded family planning manual states: "If both (female

and male sterilization) were equally acceptable, then vasectomy would be the medically preferred procedure" (Hatcher et al. 1989).

More research is needed on the role of men in family planning. In 1990, of 85 USAID-funded operations research projects, only seven focused on the role of men.

Information, Education, and Communication

DHS data show that efforts by USAID and the family planning programs to enhance information, education, and communication substantially increased women's knowledge of family planning. In the six countries, the percent of married women who knew of at least one modern contraceptive method ranged from 76.5 percent in Ghana to virtually 100 percent in Tunisia. In Ghana, an outstanding USAID-supported effort in three regions, undertaken as part of a contraceptive supplies project (1985–92), increased CYP—the number of years contraception protects a couple from pregnancy—by nearly 90 percent.

Yet other data raise questions about the effectiveness of the education effort in all six countries. Three of the technical reports indicate substantial problems in information, education, and communication. The Honduras team concluded that "a modern coordinated program is badly needed." The Philippines report observed that the program failed to inform couples of the health benefits of family planning. And in Pakistan, a 1984 USAID evaluation found that the "most troubling" program deficiency was lack of a comprehensive communications strategy. To follow up, USAID in 1986 budgeted $5 million for mass media education, yet by 1991, only a very small portion of that money had been spent.

Data also show that education is greatly needed in the following three areas to:

1. Increase use effectiveness. Despite the effective information, education, and communication effort in Tunisia, Tunisian women cited "method failure" as the principal reason for discontinuing use of pills, IUDs, and vaginal methods of contraception (Aloui et al. 1989). This indicates that they became pregnant while using one of these methods and lacked sufficient information on how to use the methods effectively.

2. Enhance understanding of all methods, their advantages and disadvantages, especially potential side effects. In Ghana and Kenya, 24 percent and 23 percent of surveyed women, respectively, cited "lack of knowledge," rather than "religion" or "husband's opposition," as the principal reason for not using contraceptives (*Ghana Demographic and Health Survey 1988* 1989; *Kenya Demographic and Health Survey 1989* 1989).

3. Reduce fears, rumors, and myths about family planning. CDIE and other focus group research indicated that myths and rumors among men and women about severe negative side effects, disease, and even death caused by modern contraceptives represented a *substantial constraint* to increasing contraceptive use. The Honduras team's research indicated that a male physician working in a government family planning clinic would not refer clients for vasectomy because he was "sure it impairs sexual functioning." In all eight Honduras focus groups, participants, including providers, stated that pills cause white spots on the face. In Tunisia, focus groups indicated that women and men believed that the IUD causes cancer and "circulates throughout the body," and that vasectomy causes impotence.

In 1992, the percentages of USAID expenditures allocated to communications were 2 per-

cent in Latin America, 5 percent in the Near East, 8 percent in Asia, and 10 percent in Africa (*Overview of A.I.D. Population Assistance, FY 1992* 1993).

Quality of Care in Service Delivery

The CDIE assessment found that USAID-assisted family planning programs need to increase attention to quality of care, which refers to the way clients are treated by the system providing services and the types of services provided (Bruce and Jain 1991). This will ensure that clients continue using family planning and will enhance effectiveness and impact.[9]

Improving clients' continuation with family planning appears to be one of the most important ways that family planning programs can enhance impact.

Research has shown that quality of care affects clients' knowledge, satisfaction, and behavior. Thus, it affects acceptance of and continuation with family planning and is *directly linked to impact.* If clients are dissatisfied with a contraceptive method or the service provided, they may discontinue use. Thus, an important indicator of quality of care is the one-year method continuation rate—the percent of people still using the method after one year.[10]

A recent analysis convincingly demonstrated the negative consequences of a failure to promote continuation. *It revealed that programs with low acceptance of contraceptives but high continuation rates can have significantly greater impact on contraceptive use than programs with high acceptance but low continuation rates.*

The CDIE assessment found that, where data were available, continuation rates for pills were low in Honduras, the Philippines, and Tunisia. In Tunisia, continuation rates for IUDs were "satisfactory" at 77 percent.

While overall quality of care in the Tunisian program and the NGO program in Honduras was very good, it was weak in the other programs. In Honduras, the CDIE team identified only one woman in eight focus groups who had received follow-up attention after discontinuing use of a method. In the Philippines, more than 50 percent of supply-point workers said they had made no home visits in the previous 12-month period. Pakistan's service outlets were so meager in 1985 that 30 percent had no toilets, 20 percent had no water, and 23 percent had just one room for five staff members and the clients. And focus groups in Ghana revealed that women were extremely concerned about whether the service provider would reveal to others that they had accepted family planning: confidentiality was critical because in Ghana it is undesirable for a woman to admit she uses contraception. In Ghana, quality of care meant that providers would not have a "slippery mouth."

The Philippines assessment pointed to USAID's insufficient attention to continuation rates and its implications for impact. The team stated, "Detailed questions concerning performance were neglected. Performance was

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9 The CDIE teams used a framework for assessing quality of care developed by the Population Council (see Bruce 1990, 61–91). Bruce's working definition of "quality of care" incorporates six elements: the degree of choice of contraceptive methods, the quality of information provided, the technical competence of the providers, interpersonal relations between provider and client, the existence of mechanisms to encourage continuity, and the existence of an appropriate mix of services.

10 Ross and Frankenberg 1993, 48–56. The median one-year continuation rate for IUDs is 74 percent; the rate is 45 percent to 50 percent for oral contraceptives and 38 percent for injectables. The lower effectiveness of condoms shows in a continuation rate that is no higher than 45 percent, and for rhythm, the continuation rate is typically about 40 percent.

measured in terms of numbers of acceptors, with very little concern... [for] how many times [the client] had been counted as a new acceptor, how long she would continue.... There was a preoccupation with distributing a variety of pills... rather than with the number of continuing users" (Schmeding et al. 1992).

In sum, USAID's approach stressed recruiting new users rather than retaining current users. Evaluations that emphasize recruiting new users will mistakenly rank a program's impact greater if clients have more intervals of discontinuing contraception, because the reported rate of new acceptors will be higher. USAID needs to place equal, if not greater, emphasis on retaining users.

Table 7. What Accounts for Performance Variation? Program Approaches for Fertility Decline

	Tunisia (high performance)	Kenya (improving performance)
Host country had clear objectives for USAID family planning program?	Yes: •In 1980, USAID/Washington and Tunisian Government agreed to increase service delivery in rural areas •During 1980s, each province had clear annual objectives, with achievement assessed annually	Yes: •Plan initiated at 1984 First National Leaders' Population Conference. By 1989 Kenya had developed "Plan of Action for the 1990s," with clear targets and strategies
Organizational structure	•Vertical. Decision was made in 1990 to integrate	•Integrated*
Public sector delivery channels	•Community-based distribution programs tested, implemented in 1970s •Fixed centers used home visitors •Mobile units and teams reached rural areas •Public sector midwives trained to insert IUDs	•Integrated with maternal and child health care in hospitals, health centers, dispensaries •Public sector provided 68 percent of services •Pilot community-based distribution program supported by Ministry of Health (in addition to NGO community-based distribution projects)
Private sector delivery channels	•Public sector contraceptive social marketing program provided condoms, pills, IUDs through private sector pharmacies •No other involvement of commercial sector •No use of NGOs	•NGOS were major contributor to family planning. By 1990, 35 percent of all sublocations were served by community-based distribution workers •USAID/Kenya pioneered provision of services through for-profit sector in 1984; now accounts for 10–13 percent of contraceptive use
Strategies to increase demand	•Program added family planning educators (animatrices) to mobile units and fixed clinics in early 1980s for interpersonal counseling; also employed home visiting workers	•Program heavily emphasized community-based distribution strategies after 1975; brought family planning to homes and workplaces
Method mix	•Sterilization, IUDs widely available •Program relied less on pills •Male sterilization not widely available	•Female sterilization widely available. Kenyan voluntary surgical contraception program now a model for all of Africa •Pills very popular •Few male sterilizations performed •Injectables increasingly popular
Training	•One of USAID's most important contributions was support for training at *all levels:* preservice, in-service, management, diagnosis/planning/evaluation, training of trainers, clinical •Effect of training on service delivery evaluated •Program had capacity to provide training to other countries	•Training program improved; 75 percent of Ministry of Health workers had training in family planning •USAID trained 61 percent of those trained in family planning

*For a discussion of vertical versus integrated program structure, see page 61.

Table 7. What Accounts for Performance Variation? Program Approaches for Fertility Decline (cont.)

	Tunisia (high performance)	Kenya (improving performance)
Evaluation and recordkeeping	•Service statistics used nationwide to analyze annual trends and performance in each province •Regional managers gathered and analyzed local data to assess performance and solve problems •USAID evaluations used for decision-making	•Three USAID-supported surveys influenced population policy •1977 survey showed Kenya had highest fertility rate in the world. It alarmed leadership and contributed to increased commitment
Quality of care	•Program had very good interpersonal counseling •IUD 1-year continuation rate acceptable at 77 percent. Few sterilization complications •One-year pill continuation rate low •Rumors and fears of negative side effects prevailed	•Program relied on female service providers for counseling and service to encourage acceptance and continuation •Several small longitudinal surveys estimated continuation rates similar to those in more developed programs
Information, education, and communication	•Program strongly emphasized interpersonal counseling throughout 1980s •Mass media program was initiated in 1988	•Wide variety of media used •Private sector program sponsored successful poster competition and calendar
	Honduras (mixed performance)	**Philippines (modest performance)**
Host country had clear objectives for USAID family planning program?	Not consistently: •No clear objectives in public sector program to measure performance against •Clear objectives in private sector program	Not consistently: •POPCOM, the Population Commission, set unrealistic targets; failed to reach them; damaged program's credibility •During 1978–80, Outreach program's goals were achieved in rural areas
Organizational structure	•Both approaches tried	•Vertical
Public sector delivery channels	•In 1960s–70s, USAID principally supported Ministry of Health. By late 1970s, the ministry was blocking these efforts almost totally •Service delivery through ministry remained weak during 1980–90s	•Until 1976, program used static clinics •Outreach program, launched in 1978, trained more than 3,000 community-based distribution workers •Religious opposition increased. By 1988, Outreach was moribund
Private sector delivery channels	•In 1980s, USAID gradually increased support to ASHONPLAFA, a private, nonprofit service delivery organization that became a leader in family planning •Strong contraceptive social marketing program	•USAID emphasized NGOs after 1986 •No contraceptive social marketing program •Workplace-based program initiated
Strategies to increase demand	•ASHONPLAFA had excellent community-based distribution. •Ministry of Health and ASHONPLAFA had home-visiting workers •Ministry of Health community-based distribution program weak; no family planning information, education, communication	•Outreach project had very good community-based distribution program, 1978–82 •Program ineffective in increasing demand for temporary methods

Table 7. What Accounts for Performance Variation? Program Approaches for Fertility Decline (cont.)

	Honduras (mixed performance)	Philippines (modest performance)
Method mix	•Mix relatively good for ASHONPLAFA •Ministry mix weak •Prevalence of IUDs low •Male sterilization not widely available •Use of traditional methods increased	•Female sterilization widely available, most favored •No increase in demand for reversible methods in 15 years •Male sterilization almost nil
Training	•ASHONPLAFA achieved goals for 1989–91 but underspent training budget •Ministry of Health provided training in IUD insertions	•Vast majority of training before 1979 •Evaluation stated "enormous" number trained: 421,362
Evaluation and recordkeeping	•No evaluation unit assessed performance or achievement of objectives •Much data published without analysis of management implications •Ministry of Health stronger in implementing special studies	•USAID evaluations repeatedly referred to weak management information system
Quality of care	•Mass media information efforts and individual counseling neglected •Continuation rates for pills and IUDs low •Rumors and fears of negative side effects prevailed	•In contrast to other Asian countries, program reported high discontinuation rates for pills, IUDs, and condoms
Information, education, and communication	•A modern, coordinated program was and still is badly needed	•Between 1975 and 1980, program increased awareness of family planning to 97 percent of married couples of reproductive age •Program failed to inform couples of health benefits of family planning
	Pakistan (weak performance)	**Ghana (weak performance)**
Host country had clear objectives for USAID family planning program?	No: •Objectives changed frequently during 20-year period	No: •In spite of explicit, quantified goals in 1960s population policy statement, no consensus that goals of family planning were a national priority
Organizational structure	•Both approaches tried. Decision in 1991 to integrate	•Integrated
Public sector delivery channels	•From 1970s through mid-1980s, government relied on USAID-recommended "inundation scheme," supplying contraceptives rather than enhancing demand •Services principally through clinics; outreach minimal to none	•Contraceptives supply limited primarily to urban areas, in which only 30 percent of population live •After 1986, service delivery points expanded dramatically
Private sector delivery channels	•Contraceptive social marketing program established in 1984; increased availability of condoms at pharmacies •In 1986, USAID increased support for family planning NGOs, yet NGO capacity extremely weak	•Contraceptive social marketing campaign, initiated in 1985, significantly expanded delivery points for contraceptives provided by commercial sector •Couple-years of protection increased

Table 7. What Accounts for Performance Variation? Program Approaches for Fertility Decline (cont.)

	Pakistan (weak performance)	Ghana (weak performance)
Strategies to increase demand	•Two 1976 USAID evaluations recommended strategies to enhance demand. USAID developed project but did not implement it when assistance recommenced, 1981	•Community-based distribution program set up in 1986 •Demand for contraceptives remained weak despite increasing awareness
Method mix	•Availability of pills, IUDs low •Condoms more widely available •Only female sterilization available in public, private sectors	•Limited method mix at most sites •Medical resistance meant sterilization not widely available •Social marketing made condoms, foam tablets widely available through chemist shops
Training	•1991 evaluation found expenditures for training short of funds budgeted •USAID supported few people for training •1991 evaluation found urgent need for training that should have been taken up at highest levels	•Country benefited from substantial USAID-supported training, including clinical skills and management
Evaluation and recordkeeping	•Program used service statistics only minimally to analyze performance, trends •USAID supported development of evaluation capacity at National Institute of Population Studies, now center of programmatic evaluation	•Program had no standardized system of recordkeeping, data collection, or central reporting by agencies providing services •Improvements being made in USAID-supported Ministry of Health management information system
Quality of care	•Quality of care in service delivery very weak •Pill, injectable, condom continuation rates low, at 30 percent	•Family planning workers paid careful attention to quality of care •Workers promoted thorough screening; which may have been significant medical barrier •Clients concerned about confidentiality
Information, education, and communication	•1984 USAID evaluation found no comprehensive communications strategy •In 1986 USAID budgeted $5 million for mass media education rather than interpersonal communication, although few had radios or TVs •By 1991, only a small portion of budget had been expended	•USAID program contributed to widespread knowledge of modern contraceptives, a precursor to any increase in contraceptive use

Box 5. Steps in Using the Demographic and Health Survey and Other Data in Policy Dialog

1. Define the policy agenda. What policies inhibit increased contraceptive use? Are there medical barriers (e.g., concerns that only physicians, rather than service providers or lay workers, should distribute contraceptive pills)? Are there high import duties on contraceptives? Are there prohibitions on advertising contraceptives or using mass media for education? Is there a lack of recognition of the health benefits of family planning and thus lack of support for family planning in health policy?

2. Examine the extent to which the DHS and other surveys will provide information on policy issues. USAID managers need to determine whether the Demographic and Health Survey, undertaken every four to five years, will provide *timely* data. If not, what additional data-gathering activities are feasible?

3. Examine the policy implications of the DHS and other surveys. USAID managers should support analyses of the policy implications of the Demographic and Health Survey and other surveys. As an example, a recent analysis of the policy implications of 1988 Tunisian DHS data observed:

- Women's fertility aspirations are considerably lower than fertility rates. Program objectives should include helping women avoid unwanted births, possibly through greater targeting of postpartum women.
- From 1978 to 1988, women with no education who used family planning increased by more than 50 percent. In 1988, however, women with no education still constituted 60 percent of women of reproductive age. Future gains in contraceptive use will have to come from among less-educated women, and the program will have to make greater efforts to target this group.
- One third or more users discontinued the pill (30 percent) or the IUD (36.5 percent) because of alleged side effects. The program needs to enhance interpersonal counseling and follow-up to ensure that women are fully informed of possible side effects to minimize program dropouts and improve continuation rates (Ayad et al. n.d.).

4. Present data to government decision-makers and offer follow-up for further analyses. Results of data analyses should be presented in a user-friendly way—clear, understandable graphics; polished presentations; and succinct handouts. Managers should be prepared to offer technical assistance to follow up on questions host government decision-makers might have.

5. Fund and present data to advocacy groups that support policy change. Women's groups, health worker groups, research groups, and others may be extremely supportive of policy change. USAID can build a more broadly based constituency for change by ensuring that information from surveys is presented to and used by these groups. This approach has been used with considerable success in the education sector (Crouch 1994) and with other groups working to strengthen the rule of law.

Box 6. Innovative USAID Approaches in the Case Study Countries

Community-Based Distribution

Honduras. The Honduras community-based distribution program—implemented by the country's private, nonprofit family planning organization, ASHONPLAFA—recruited women who operated home-based general stores called *pulperias.* The program had a network of almost 1,800 distributors in all 18 states and was highly successful. It eventually recruited 54,200 users, about 5 percent of women of reproductive age.

Philippines. A 1976 USAID analysis showed the clinic-based system was insufficient to reach new and continuing users. The government agreed to create one of the largest community-based distribution programs ever attempted. Outreach (for which USAID provided most of the funds) established one location for contraceptive resupply for every 99 married women of reproductive age. This compared extremely favorably to the Indonesian effort, which reached 19 percent of users, and Thailand, which reached 10 percent. The program trained more than 3,000 full-time outreach workers. A 1981 USAID evaluation showed that in Outreach project areas, use of more effective contraceptive methods increased from 11.4 percent in 1978 to 14.9 percent in 1980.

Kenya. In the central community of Chogoria, USAID helped establish a pioneering distribution program that became one of the most successful family planning initiatives in Africa. Chogoria hospital reached out to serve the rural population (approximately 380,000) through satellite dispensaries. By 1985, the contraceptive prevalence rate in the catchment area was 43 percent (overall country prevalence rate was 17 percent). Chogoria's total fertility rate was 5.2, almost three births lower than the average for rural Kenya. Contraceptive use has continued to increase and now approaches levels found in developed countries.

Ghana. No distribution program was implemented in Ghana until 1988 when USAID authorized a traditional birth attendant component of the contraceptive supply project. Under the project, the Ministry of Health trained almost 3,000 traditional birth attendants in five regions of the country, as well as 63 master trainers and 307 supervisors.

Contraceptive Social Marketing

Tunisia. From 1986 to 1990, the Tunisian program provided condoms and pills at nearly 1,000 supply points (principally pharmacies) throughout the country.

Honduras. Because of public sector opposition to family planning, USAID increased support for ASHONPLAFA's social marketing program. By 1992, the program reached 385 of the country's 421 pharmacies and 178 of the 272 other stores that sold medicines in 17 cities around the country. The target of active users was 40,000 by 1989. The program reached 45,500. A 1986 survey of pill users found the program was reaching its target population of lower- and middle-income women.

Box 6. Innovative USAID Approaches in the Case Study Countries (cont.)

Pakistan. Despite government skepticism, USAID, the sole donor, reached an agreement with the government to begin a social marketing program in 1984. Sales of contraceptives nearly doubled from 1987 to 1991. Given that condoms constituted 3.2 percent of the contraceptive prevalence rate of 14 percent and that 75 percent of condoms used were contraceptive social marketing condoms, the program made an important contribution to increasing contraceptive use.

Ghana. USAID was sole donor supporting the social marketing project. An attempt to introduce social marketing in the 1970s failed, in part because the incentive structure was insufficient to generate support of retail outlets. USAID revived the activity in 1985, and although it still has some important pricing issues to resolve, it successfully marketed condoms, oral contraceptives, and vaginal foam tablets through a network of chemical sellers and pharmacies in urban and rural areas. Couple-years of protection increased from 62,000 in 1987 to 115,000 in 1991.

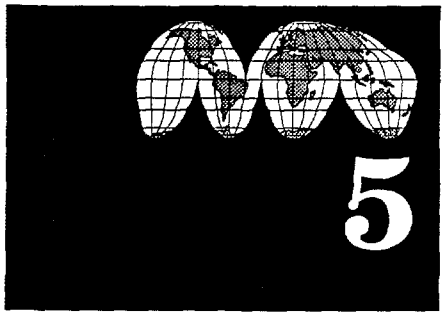
Female Sterilization

Kenya. The prevailing view was that Kenyans would never voluntarily end fertility. USAID began support for voluntary surgical contraception in 1982, when only 68 operations per year were performed. In 1989, sterilization totaled 10,000 a year and service sites increased from 2 to 50.

Tunisia. In the late 1970s, USAID introduced laparoscopy and the required intensive training and equipment maintenance. Laparoscopy permits sterilization of nonpostpartum women. Female sterilization became the second most used contraceptive method, accounting for 25 percent of the increase in contraceptive use from 1978 to 1988.

Commercial Private Sector

Kenya. Kenya launched a project to provide family planning through for-profit firms. The project added family planning to health services offered to employees or patients of for-profit companies, nursing homes, and religious and educational institutions.



5 Efficiency

Unavailability of Cost Data

MEASURING EFFICIENCY has been a less-than-prominent element of national family-planning programs in the six countries. More generally, a tradition for analyzing program efficiency comparable to the focus on program effectiveness has been lacking. CDIE defines efficiency as "the results of an intervention in relation to its costs."

Neither USAID nor the six case study countries gave serious, sustained attention to efficiency measurement. To illustrate:

- *Philippines.* The only cost-effectiveness study available was a mid-1970s undergraduate thesis, despite successive USAID evaluations that called attention to this deficiency.
- *Ghana.* The team was unable to locate cost-effectiveness information either in the literature search or in donor, private sector, government, or program documents. A $30 million project was going forward without cost-effectiveness analysis of alternative strategies. (Under the new project, however, data will be collected, providing a basis for assessing alternatives in the future.)
- *Honduras.* The CDIE literature review found no compilation of cost data for USAID-supported family planning services and providers.
- *Tunisia.* The government conducted two USAID-supported cost-effectiveness studies. In 1992, the family planning program created a special division charged with cost accounting. The CDIE team observed, however, that the division should have been created more than a decade earlier, when it was known that USAID assistance would end.

Serious data and methodological problems inhibited efficiency analysis. First, as the family planning programs evolved, they became extremely complex. As they matured, difficulties in tracking resources multiplied. Data, even if available, were usually unreliable and incomplete. Funding, moreover, came from various sources, each with distinct accounting systems. Sources varied from year to year, and donor and host country funds frequently were mingled.

In addition, the costs of integrated family planning programs, which sometimes used staff and resources of existing ministries, were hard to disaggregate in national budgets—a difficulty encountered by the Ghana team. Funding supplied to NGOs through affiliated private voluntary organizations (PVOs) proved especially difficult to trace, as ob-

served in the Philippines and Kenya studies. The Honduras team noted the difficulties of conducting cost analysis.

For these reasons, it was difficult for CDIE teams to use similar methodologies to assess efficiency. Only two teams (Pakistan and Honduras) examined method cost-effectiveness. Given inconsistencies in the data, comparisons are not meaningful. Accordingly, the findings of the Honduras team's cost-effectiveness analysis are as follows.

- For ASHONPLAFA, a USAID-assisted NGO that provides the majority of contraceptives and services in Honduras, costs increased from 1980 to 1991. Yet the years of protection from pregnancy provided by contraceptives grew even faster. As a result, efficiency improved.[10]
- Comparing programs, the medical services program was the most cost-effective. The cost per couple year of protection of the community-based distribution program was twice as high and social marketing three times as high as the medical services program. (Social marketing, however, is generally cost-effective.)
- Comparing methods, voluntary sterilization was the most cost-effective, followed by IUDs. Oral contraceptives were considerably more costly. These findings are consistent with available literature.

The case studies underscore why family-planning priorities cannot be set *solely* based on cost data.

- The social marketing program in Honduras was the least cost-effective, yet recovered all costs through sales. Such a program appears to merit continued support.
- USAID weighed cost-effectiveness considerations with the need to reach groups that had access only to public sector services in Honduras. Cost considerations argued for investing in the nonprofit private sector, while welfare concerns supported funding public sector interventions.

If USAID invested primarily in more cost-effective permanent methods, while clients favored temporary methods, quality of care would suffer. To ensure quality, a range of methods must be provided. USAID must use cost data as well as other information (such as client preferences, cost-recovery potential, and welfare considerations) to establish investment priorities. USAID must also gather cost data to monitor cost-effectiveness trends during implementation and to improve efficiency.

Need for Efficiency Improvements

To examine cost-effectiveness consistently, CDIE used the FamPlan model to assess costs per birth averted in Kenya, Pakistan, the Philippines, and Tunisia. The analysis reveals that, with the exception of Tunisia, costs per birth averted declined over the past 20 years. Nevertheless, the data underscore two critical management issues (see table 8).

1. While costs per birth averted declined, they remained high in all six countries in 1990. A cost of $20 per birth averted is considered acceptable, yet 1990 costs in case study coun-

[10] A cost of $18 to $20 per couple year of protection or per birth averted is considered cost-effective by many observers. This standard, however, also depends on the stage of the family planning program. As programs mature, lower costs per couple year of protection or per birth averted would be expected. (With respect to cost per couple year of protection, see Janowitz et al. 1990.)

Table 8. Cost-Effectiveness of Family Planning Programs

Country	Cost Per Birth Averted (in 1990 $US)				
	1970	1980	1990	% change 1970–80	% change 1980–90
Kenya	—	414	118	—	-71
Pakistan	934	63	57	-93	-9
Philippines	299	63	21	-77	-66
Tunisia	52	41	87	-25	111

Note: Analyses not undertaken for Ghana and Honduras.

tries except the Philippines were substantially higher—$57–118.

2. Unless managers consistently monitor trends, costs may increase while efficiencies decrease, as the Tunisia data indicate. The CDIE team had insufficient time to undertake a second analysis to determine the reasons for the cost increase. (The Tunisia data indicated, however, that mobile units were cost-effective at US$18.66 per couple year of protection with tubal ligation.)

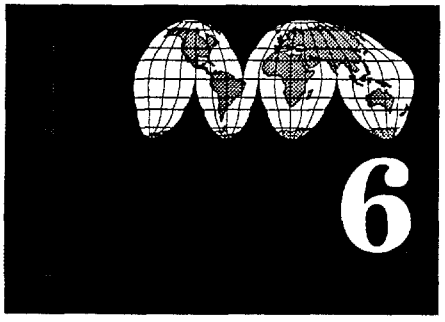
Overall, the data in table 8 suggest that program efficiency can be improved. The Philippine case study, for example, examined the need for the following efficiency improvements.

In 1987, 42 percent of Philippine program clients used ineffective methods of contraception. Yet surveys indicated that substantial percentages of Filipino women wanted no more children. To improve program efficiency, the team recommended improvements in communication to educate clients about modern methods.

Training funds were used inefficiently. Substantial funds were expended, yet training provided neither adequate instruction in the effectiveness of different methods nor information about the health benefits of child spacing. Service providers mechanically stressed the potential counterindications of pills and IUDs without informing clients of the health benefits of spacing (and limiting) through use of effective, modern methods. To improve efficiency and reduce high dropout rates, the CDIE team recommended that training programs emphasize the health benefits of modern family planning methods.

Historically, the overall approach to training was inefficient. Health workers' schools failed to include family planning courses. The program is now addressing this issue. Family planning knowledge and skills are being integrated into the preservice curriculum at nursing, midwifery, and non-Catholic medical schools, which will result in significant savings in program funds and staff time.

Given the anticipated scarcity of resources in the years ahead, the likelihood of increasing demand for contraceptives, and the requirement to address unmet need, USAID and host governments must enhance efficiency in family planning programs.



6 Financial Sustainability

USAID HAS SUPPORTED first steps toward financial sustainability in all six case study countries by testing cost-recovery strategies and shifting public sector costs to the private sector (see boxes 7 and 8). USAID's work has helped mobilize an international consensus on the feasibility and acceptability of service delivery through the private sector.

This chapter examines progress toward financial sustainability in the case study countries; financial sustainability strategies, especially through the commercial private sector and contraceptive social marketing programs; and the contribution the family planning program makes to the sustainability of social service programs. CDIE defines financial sustainability as "the capacity to generate requisite resources without external support." Financial sustainability is a function of inputs (revenues) and outputs (costs, cost-containment, and efficiency improvements). Discussion of the circumstances under which sustainability can or should be achieved is not included; this was not addressed in the case studies.

Financial sustainability was of less concern to the Agency in the late 1970s and early 1980s than it is now. In view of this, CDIE did not set, as an evaluation standard, the achievement of complete financial sustainability in family planning programs. However, because USAID has always been concerned about financial performance, CDIE regarded achieving sustainability as a long-term objective. Thus, it sought evidence of progress toward financial sustainability and evidence of USAID's contributions to this progress. The finding in all six countries—that although all the family planning programs will continue, they have not yet achieved financial self-sufficiency—is not surprising.

The CDIE teams found, however,evidence of progress that has important implications for Agency planning. In each case study country where USAID took serious steps toward achieving financial sustainability, progress was evident, even in extremely poor countries. In Ghana, the contraceptive social marketing project launched a cost-recovery scheme: the return-to-project fund. In Honduras, USAID set financial sustainability targets—and despite conflicts between financial sustainability and program coverage, the NGO met and the social marketing program exceeded the target. USAID/Pakistan pressed strenuously for a "private sector breakthrough"—the social marketing program—and succeeded. And in Kenya the private sector, thanks in large part to USAID's early efforts, now contributes 10 percent to 13 percent of total contraceptive use.

Less was achieved in the Philippines and Tunisia, where USAID made less of an effort toward financial sustainability. Interestingly, the major recommendations of USAID/Tunisia's Project Completion Report involved

ways to enhance sustainability. The report's sole lesson is: "When a program has been nurtured for over 20 years by donors, introducing the notion of self-sufficiency and preparing the program for donor withdrawal requires seven to 10 years."

The CDIE assessment provides clear evidence that with foresight and thoughtful planning, progress toward financial sustainability can be achieved, even in small and poor countries (see boxes 7 and 8). This is consistent with the USAID literature. The lessons suggest that the health and family planning projects most likely to be sustained include a sustainability plan *at the outset,* as well as a plan to phase out donor assistance and phase in local support. The literature suggests that sustainability does not just happen; it has to be planned for (USAID/Lesotho 1987; USAID/Indonesia 1979; USAID/The Gambia 1987; USAID/Burkina Faso 1989).

Financing Contraceptive Commodities

None of the CDIE country case studies examined alternative strategies for financing contraceptives, one of the most expensive items in family planning budgets. Governments

Box 7. USAID-Supported Financial Sustainability Strategies

User fees. The Kenya voluntary surgical contraception program attempts to recover some costs, but its experience demonstrates some of the limits of relying on user fees to attain financial sustainability. Client charges range from $1 in government facilities to $2.50 in the Family Planning Association of Kenya and Christian Health Association of Kenya. A 1988 evaluation found that above $5, the fall-off in clients who wanted voluntary surgical contraception but found price a barrier was significant. This is not surprising given Kenya's average per capita income of $1 per day and highly uneven income distribution. The procedure costs $50–60 per client, so payment cannot, practically, be amortized, and it is unlikely that these services can become financially sustainable.

Delivering services through the commercial private sector. Kenya was the first country to launch a USAID bilateral project for commercial private-sector delivery of family planning services. The Kenya Family Planning Private Sector project began in 1984. Its purpose is to add family planning to health services that for-profit companies, nursing homes, and religious and educational institutions offer employees or patients. These organizations receive technical assistance for two years, after which they are expected to provide services at their own expense. Under the project, 54 organizations provide family planning services that account for 10 percent to 13 percent of Kenyans using modern contraceptive methods. Sustainability of these organizations has been mixed. Of the 44 organizations that have completed two years of support, 61 percent no longer receive assistance, with the exception of free contraceptive supplies from the Ministry of Health. All continue to provide family planning. However, a sizable proportion, including eight for-profit companies, should have "graduated" from assistance, but continue to receive some technical or financial support. The transition to self-financing is not as smooth as expected—in part because many of the organizations are nonprofit NGOs and do not have the resources to move quickly to self-financing. Also, many for-profit companies have been unable or unwilling to assume the costs of education and outreach, though there is agreement that these are essential to success.

Box 7. USAID-Supported Financial Sustainability Strategies (cont.)

In the Philippines, the Benguet Corporation has provided family planning services to its employees since 1968. (It is not clear whether USAID provided technical assistance, but because USAID has used the approach discussed here in Kenya and elsewhere in the developing world, it is reported on here.) A study found that the benefits to the corporation of providing family planning to its employees as part of their health benefits substantially exceeded costs. The study found that each birth averted meant the company saved costs of maternity benefits, hospitalization for high-risk births, educational benefits for an additional child, hospital delivery, prenatal and postnatal medical services, and replacing a woman employee on maternity leave.

- Total costs declined from 71,000 pesos (P) in 1972 to P35,600 in 1987; costs per users, from P240 to P24; and cost per birth averted from P1,414 to P144.
- Benefits rose, in current and real terms, from 1972 to 1987. Increases in total benefits from family planning services resulted from an increase in births averted and expansion of company-provided and maternity-related benefits for each dependent.
- The benefit–cost ratio was high and showed a long-term increasing trend, from a low of 0.46 shortly after program start to a high of 14.6 in 1985.
- For every P1,000 spent by the company to run its family planning clinic in 1987, it saved an average of P12,000.

A public–private sector partnership. The public sector Honduran Social Security Institute works with 80 companies to deliver family planning services at the work site. With the help of the plant manager, medical staff from the institute hold educational sessions for employees and provide contraceptives and related reproductive services. The program began in 1987 and is beginning to catch on. Institute doctors and plant managers now see that a functioning reproductive risk program at the work site reduces birth complications that must be addressed through insurance and clinical programs. An institute study has shown that a normal birth costs $78, while a birth with complications costs an average of $192. With family planning and reproductive risk services, the institute has estimated that birth complications can be cut in half. USAID is providing all the contraceptives and some training.

Cost recovery in a not-for-profit, private sector organization—charging fees for products and services. ASHONPLAFA in Honduras agreed, under a USAID Private Sector Population II project, to establish financial sufficiency targets for some of its services and products. Despite conflict between coverage and sustainability objectives, ASHONPLAFA made progress in meeting sustainability objectives. Prices for most ASHONPLAFA products and services doubled in 1990, and, as a result, ASHONPLAFA revenues swelled by 54 percent. Nevertheless, the initial "sticker shock" caused a sharp drop in sales. The Community Services Program, for example, abruptly lost 16,635 users, almost one third of its customers. Sales gradually recovered, however, and in 1992 sales were almost back to their 1990 level. Although provisions have been made for a sliding fee scale, the pressure on ASHONPLAFA to be self-sufficient forces it to allow few exemptions to payment. USAID is preparing to finance a study that will test the effect of different pricing policies on demand and use of family planning services. ASHONPLAFA's locally generated income figures show an upward trend. In percentage terms,

Box 7. USAID-Supported Financial Sustainability Strategies (cont.)

local revenues provided 3 percent of the budget in 1989 and 12 percent in 1992. Neither USAID nor ASHONPLAFA believes that the organization can achieve 100 percent financial sustainability through sales of family planning products and services. ASHONPLAFA's leadership is attracted to the idea of having other income-generating units that could permanently cross-subsidize its family planning services. The organization's leadership has expressed an interest in a range of possibilities: selling its family planning services to large corporations for use by their employees; a permanent endowment; a printing plant; or a hardware store.

Box 8. Achieving Financial Sustainability in Contraceptive Social Marketing Programs

Kenya and the Philippines. A contraceptive social marketing program only recently began in Kenya. The lack of a marketing program in the Philippines was considered by the CDIE team a major program deficiency.

Honduras. The marketing program was not as cost-effective as the community or medical services programs (which provided surgical contraception, the most cost-effective modern method), but was the only one that recovered all of its costs through sales. It was the most successful program in terms of financial sustainability. Income as a percent of costs was 115 percent, compared to 67 percent in the community-based distribution program and 21 percent in the medical/clinical program. (USAID's grant requires that the program generate revenues through sales to cover 100 percent of its direct costs, excluding contraceptives.) From 1984 to 1989, the program reached 45,500 users, 5,500 above the target. A survey found that the program was reaching its target of lower- and middle-income women. ASHONPLAFA instituted a social marketing program that is strong in product, price, and place. Promotion is weak. According to the 1992 evaluation, only a limited amount of promotional advertising had been accomplished. Promotion is essential to increased use.

Ghana. In Ghana, under the Social Marketing for Change (SOMARC) project, funding supports the distribution of condoms, vaginal foaming tablets, and low-dose oral contraceptives. The Ghana project is using all donated commodities. (In countries that have higher contraceptive prevalence and better commercial infrastructure, SOMARC purchases contraceptives commercially through a private sector partner. This is not yet possible in Ghana.) To achieve some cost recovery, the project has incorporated a return-to-project fund as part of its pricing mechanism. As of December 1990, the project had generated $20,000 in those funds. Couple year of protection increased through sales of contraceptives from approximately 60,000 in 1987 to more than 100,000 in 1991. The cost per couple year of protection declined from approximately $18.60 in 1987 to $8.90 in 1991. Projects are usually considered cost-effective when the cost per couple year of protection is $18 to $20.

Tunisia. Although contraceptives had been distributed commercially for years in Tunisia, a full-fledged social marketing program was only initiated in 1985 with USAID as the sole

Box 8. Achieving Financial Sustainability in Contraceptive Social Marketing Programs (cont.)

donor. Because the program was implemented through the public sector, there were numerous constraints to developing an aggressive, efficient program—inexperience with market research, Ministry of Health prohibitions on brand-name advertising, government preference for heavy subsidization, and unwillingness to experiment with privatization. The program increased availability of pills and condoms at 1,000 pharmacies throughout the country. As in many other social marketing programs, the government did not collect data on consumer sales. By 1990, as USAID assistance ended, the government was seeking to develop a long-term commodities procurement plan. The CDIE team concluded that although the program increased availability of condoms and pills, it did not contribute to financial sustainability.

Pakistan. A climate of extreme government skepticism about the role of the private sector in social service delivery resulted in years of negotiation. The USAID/Government of Pakistan agreement to launch a social marketing program was a major breakthrough. The program contributed to the increased use of condoms in the country. The cost per couple year of protection declined to $5.75 in 1991, and 77 percent of the project's condom users had monthly incomes of less than US$160. Nevertheless, the CDIE team and key informants raised questions about whether USAID monitored sales and ensured use by beneficiaries. The CDIE team's analysis showed that there was a considerable gap between the number of condoms distributed and the number of potential consumers—that is, there were too many condoms in the country per potential user. A knowledgeable USAID officer, when asked the most important lessons from the Pakistan program, commented that "USAID should know what is happening...commodities may fill the distribution pipeline but it doesn't mean that they end up in the hands of the consumer." That is, USAID should have monitored what happened to the condoms after they left the warehouse and ensured that only the amount of condoms that could be used entered the country. A literature search conducted by the team did not turn up any USAID audits of the Pakistan social marketing program. The lesson is that a project will contribute less to program sustainability if insufficient attention is paid to efficiency during implementation.

need to project the level of contraceptives required, the prospects of increased costs, and the possibility of alternative financing.

The Tunisia study demonstrates how difficulties in financing contraceptives and a more general lack of progress toward financial sustainability undermine program benefits. In commenting on the termination of USAID assistance in 1990, the team concluded "although prospects for program continuation are good...the level and scope of benefits appear to have declined...as the government struggles to find funds for program components and contraceptives."

The team pointed to the following as evidence of a decline in program benefits:

- In 1990 and 1991, the number of in-service trainees fell from 748 to 133 (55 were foreign trainees funded by other donors)
- Pill and sterilization acceptors declined between the late 1980s and 1991
- The program lacked funds to continue operations research after USAID-financed research ended.

In 1990, the Tunisian family planning program operating budget received a 19.8 percent increase and the investment budget a 57.5 per-

cent increase at a time of considerable budget austerity (Pillsbury et al. 1990). Nevertheless, the team's analysis projected a virtual doubling of contraceptive costs from 1991 to 2011 (from US$1.2 million to US$2.1 million, an underestimate of actual costs). Based on these estimates, the CDIE team concluded that financing contraceptive supplies would constitute the most severe challenge to program sustainability. The team observed that USAID and the government should have examined future demand, contraceptive costs, and the possibility of alternative financing arrangements. In failing to do so, they neglected an important aspect of planning for sustainability. The major recommendations of USAID's final completion report focused on sustainability.

Improving Financial Sustainability Through the Private Sector

Since the early 1970s, USAID has recognized that the for-profit sector is a rapidly growing and powerful force in developing countries. It has resources, infrastructure, skilled managers, and personnel who can be enlisted to support and substantially expand family planning service delivery. Among donors, USAID has pioneered the use of the private for-profit sector to increase availability of modern contraceptives through a range of centrally funded projects.[11] It has experimented with using private sector workplaces (factories, mines, plantations); organizations (health maintenance organizations, insurance companies, pharmaceuticals); and individuals (physicians, taxi drivers, traditional birth attendants, and pharmacists) as distribution channels. And it has worked with a range of enterprises that provide health services for their employees, helping them add family planning services.

Many companies assume these costs because they believe it is in their interest to do so. In 1984, Kenya was the first country to launch a USAID bilateral project to advance contraceptive distribution through the for-profit, private sector. Its efforts have met with substantial success.[12] (See box 5, page 43, on USAID-supported innovative approaches.)

The CDIE assessment, however, confirms that USAID has touched only the tip of the iceberg and has failed to exploit fully the substantial resources of the for-profit sector for the support of family planning. In only three countries—Ghana, Kenya, and the Philippines—did USAID employ for-profit channels (companies, workplaces, individuals), other than the traditional channels used in social marketing projects—pharmacies and pharmacists.

In four of the six countries, public sector sources still account for the majority of services (see table 3, page 11).[13] The public sector is subsidizing—in part through USAID's donated commodities—millions of individuals who can afford to pay for these products and

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11 Such projects include contraceptive social marketing projects—such as Social Marketing for Change and projects that work with companies, health maintenance organizations, and private sector individuals (Technical Information on Population for the Private Sector and the Family Planning Enterprise Project); projects that use the private sector for information, education, and communication (the Johns Hopkins University/Population Communication Services Project); and projects that provide management training (the Family Planning Management Training Project).

12 This project also provides assistance to nonprofit, private sector organizations.

13 The two exceptions are Honduras, where most contraceptives are distributed through the private, nonprofit family planning organization ASHONPLAFA, and Ghana.

services. Data suggest that unless USAID and host governments make a serious effort to shift service provision to the private sector, the public sector will remain the largest provider. An important finding of a 1991 study was that, in many countries, the private sector did not increase its share of the overall family planning market in the 1980s. In some countries it even lost ground to the public sector. This is inconsistent with the conventional wisdom that increased incomes result in greater use of the private sector (Cross et al. 1991).

The public sector emphasis of USAID family planning programs to date is understandable, given the need to mobilize family planning program efforts in all of these countries. The data, however, underscore the need for USAID to lead a vigorous effort to engage commercial private channels, as well as to leverage increasing private sector resources to support family planning.

Contraceptive Social Marketing Projects and Sustainability

Social marketing is the application of commercial marketing techniques toward a social goal. The techniques include market research, mass media advertising, promotional activities, retailer training, and commercial distribution. Contraceptive social marketing is the application of social marketing to increase the availability of contraceptive information and products. These projects are not geared toward economic marketing (selling the products for the highest return) but toward social marketing—selling moderately priced products to consumers at low socioeconomic levels who would not otherwise use contraceptives. A recent USAID report observed that "contraceptive social marketing projects have the potential to be completely self-sufficient and, therefore, to deliver contraceptives at no public cost" (Stover and Wagman 1992).

USAID pioneered social marketing of contraceptives throughout the developing world. The achievements of these programs in increasing contraceptive use have validated the concept and its implementation. The four projects examined by CDIE proved no exception: sales of contraceptives through the programs increased substantially in all four countries (see the contraceptive social marketing section in box 5, page 43).

The contributions of the social marketing programs to the financial sustainability of the national family planning effort, however, varied. *All contributed to financial sustainability by increasing service provision through the private sector and reducing the potential cost burden of the public sector programs.* Yet only one program—in Honduras—could be considered successful in terms of financial sustainability. It recovered 115 percent of its costs. The others recovered costs only partially, or not at all (see box 8, page 54).

USAID needs to ensure that social marketing programs make progress toward financial sustainability. As detailed in box 8, this involves ensuring the program is implemented by the private sector rather than the public sector (not done in Tunisia); monitoring contraceptive sales to ensure consumers are purchasing the commodities (warehouse distributions, not consumer sales, were monitored in Pakistan and Tunisia); ensuring there is no oversupply of contraceptives (a problem in Pakistan); developing a return-to-project fund (accomplished only in Ghana); setting financial sustainability targets (achieved only in Honduras); and eventually reducing the level of donated commodities distributed free and increasing the commercial product.

Family Planning and Social Service Programs

CDIE's analysis showed that, in four case study countries (Kenya, Pakistan, the Philippines, and Tunisia), annual savings outweigh

Table 9. Financial Returns to Family Planning Programs

	Benefit–Cost Ratios at 5% Discount Rate	
Country	**1990**	**2000 (projected)**
Kenya	0.24	1.35
Pakistan	0.80	1.60
Philippines	4.01	9.00
Tunisia	10.65	—

Note: Data analyses were undertaken only for the countries listed here.

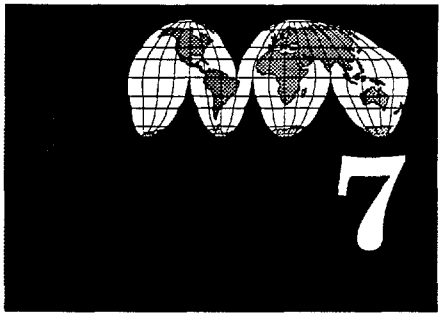
the costs of implementing family planning programs. (Annual savings refer to the discounted annual savings in social sector expenditures due to smaller populations because of births averted by family planning.)

CDIE analyzed estimated total savings to the four governments over a 20- to 30-year period due to family planning programs (results are in table 6, page 16). Then a financial benefit–cost ratio was calculated for each country (see table 9). Benefit–cost ratios for the Philippines and Tunisia are large: 10.65 for Tunisia in 1990 and 9.00 for the Philippines in 2000. This means that for each Tunisian dollar or Philippine peso invested in the national family planning program, these governments eventually will recoup 10 dollars or 9 pesos in sectorial expenditure savings. While benefit–cost ratios in Kenya and Pakistan are substantially lower, they are projected to be more than 1 in the year 2000, meaning government savings will exceed investments in family planning.

Two policy implications can be drawn from these benefit–cost ratios about the long-run financial sustainability of family planning programs.

1. Because most developing countries wish to improve the quality of services or achieve ambitious social sector targets, or both, social services expenditures will increase substantially over time. The evidence shows, however, that because savings exceed costs, family planning programs will help governments contain required expenditures for social services.

2. Because expenditures for social services, such as those for health, education and family planning, usually are to some degree interdependent in their use of government resources, financial sustainability issues for family planning should be explored in the context of the country's social services sector. Any change in the family planning program will affect the financial sustainability of the social services sector as well. The favorable benefit–cost ratios found in this and many other studies indicate that expanding family planning programs will reduce the dependency of social service sectors on external resources and improve the long-term sustainability of a country's social services program.



7 Management Issues

Enhancing Resources Through Creative Management

THE MOST PRESSING management issue in the immediate future will be finding resources to meet increased demand for contraceptives. Simply maintaining current rates of contraceptive prevalence will require that family planning programs serve more than 100 million more contraceptive users in the year 2000 than in 1990. And costs to donors, host governments, and the private sector of effectively meeting needs in the near term will likely double, as the Tunisia case demonstrates.

The size of past USAID support for family planning has been substantial. Examples from the case studies include the following.

- *Philippines.* Government funding for family planning covered 50 percent from 1976 to 1989. As the largest donor, USAID contributed about 40 percent of program needs from 1970 to 1988. USAID support totaled $151 million.
- *Tunisia.* From 1965 to 1980, Tunisia relied on donors to meet 57 percent of its requirements. From 1965 to 1991, USAID was the largest donor, contributing 37 percent of costs. USAID support totaled $43 million.
- *Pakistan.* By 1990, USAID supplied more than $150 million—one third of total program costs. USAID was the largest donor.
- *Ghana.* USAID has been the principal source of all funding. The most recent estimate of USAID's total contribution is $36 million.
- *Honduras.* USAID has provided about $45 million since 1965 or about 60 percent to 70 percent of total resources for family planning.
- *Kenya.* From 1972 to 1993, USAID provided $87 million, 56 percent of funding.

Information about USAID assistance to these programs compared to population size is in table 1, page 4.

Because of rapidly growing populations and increased demand for family planning, substantially greater resources than these will be required. This report examines ways that additional resources can meet future demand through creative management.

Monitoring Intermediate Outcomes in Family Planning

USAID's launching of the Demographic and Health Survey, as well as other surveys, is a landmark contribution to the population and family planning sector. The surveys have provided invaluable information about health conditions and demographic trends. Missions use contraceptive prevalence, fertility, and other data to monitor progress and trends in health and fertility.

Most of these surveys, however, provide information only every four or five years. They focus on impact and broader trends, which, while useful for senior Agency management and the ministries that USAID assists, are less helpful for daily management by USAID technical officers and host country field managers. Information on intermediate outcomes is also needed.

Information on intermediate outcomes could be used as economists use leading economic indicators to understand the direction the economy is moving. Managers could use this information during project implementation to make midcourse corrections and refinements.

All six case studies demonstrated that critical information on the following indicators was often unavailable.

Birth intervals. The interval between births is one of the most important variables affecting child survival. Yet data on birth intervals were not easily available in the case study countries, and even where they were available (Tunisia and Kenya), CDIE teams had to request special analyses. These important data are not used regularly in program monitoring.

Contraceptive continuation–discontinuation rates. Even though Tunisian managers were concerned about quality of care, continuation rates had been measured only twice during the 1980s, insufficient for close monitoring to bring about improvements.

Abortion prevalence. Abortion data were unavailable in all countries except Tunisia. In view of the link between abortion and maternal mortality, this is a critical indicator. Despite measurement difficulties, promising approaches are being developed to estimate directly and indirectly the frequency of abortion. USAID should review and use some of these approaches in its performance monitoring.

Use of contraceptives by target groups. These data were not easily available in the case study countries. Programs need to gather information on contraceptive use by target groups such as men; adolescents; and postpartum, postabortion, and illiterate and poor women.

Contraceptive use before and after implementation of a training program. Examining the effects of training on contraceptive use is critical, yet only Tunisia undertook such a study.

In addition, the case studies underscored the need for general improvements in monitoring, especially of cost-effectiveness of contraceptives and approaches (all case studies), volume of contraceptives entering the country compared to potential users (Pakistan), and number of consumer sales in social marketing programs (all case studies). (See "Evaluation and recordkeeping" in table 7, page 39.)

USAID Staffing

The presence of sufficient numbers of well-trained, professional USAID staff appears to have contributed to program success. Those programs that were most successful—Honduras, Kenya, and Tunisia—were marked by a strong USAID presence and hands-on technical assistance. In Kenya, sufficient numbers of experienced USAID professionals guided the program over the years, while in Tunisia, the program retained strong links with professionals in USAID's Office of Population. These

professionals provided technical assistance and guidance to the Tunisia program from the late 1970s through the early 1990s. In Honduras, too, the CDIE team concluded that an experienced, technically proficient in-house USAID staff was necessary to manage a politically sensitive program. Conversely, the CDIE team concluded that insufficient numbers of professional USAID staff made close monitoring of the enormous USAID program in Pakistan virtually impossible. (Throughout the 1980s, there was only one full-time USAID family planning professional managing the Pakistan program.) The CDIE team concluded that the reduction of USAID staff in the Philippines in the 1980s hindered USAID's family planning program there.

Integrated Versus Vertical Service Delivery

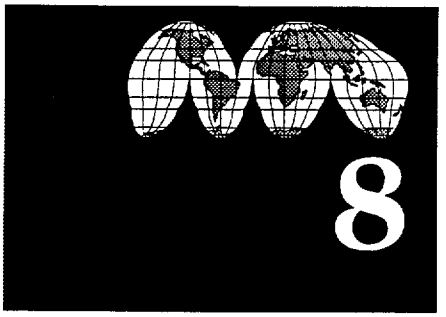
The question of whether integrated or "vertical" service delivery is the most effective has long been debated. In an integrated approach, family planning is provided through health service delivery—by using health workers, educators, and infrastructure. In a vertical approach, family planning is provided through a separate implementing agency frequently independent of the Ministry of Health.

The case studies confirmed the generally accepted view that neither approach can guarantee success. The desire to avoid duplication of effort, lack of additional resources, and the need to make services as widely available as possible argue strongly for integration right from the start. Yet information from Honduras and Tunisia suggests that integration may result in lower quality or even loss of services.

Even in Tunisia, where government commitment is high, the process of integrating family planning into health service delivery is moving slowly. The Tunisia case illustrates the difficulties and resources required when the decision is made to integrate. As Tunisia proceeds with integration, a process initiated in 1990, it must upgrade 426 health care centers (out of 1,466) where family planning services are unavailable; train male nurses to provide injectable contraceptives; and train health system physicians in delivering family planning services—especially surgical methods.

If a vertical effort is under way, the costs of integration are no small matter. Moreover, the question remains whether integration will ultimately achieve the same level of contraceptive prevalence as the vertical approach. Before deciding to implement vertical or integrated service delivery programs, USAID should continue, as it has in the past, to analyze the factors that bear on the decision to ensure that decision-makers grasp the options. Factors include the cost-effectiveness of alternative approaches, future training needs, availability of government and other resources to support training, coverage of health infrastructure, and the role of NGOs and the commercial private sector.

Cost issues might always win out. Given resource scarcity, it is difficult to justify establishing or maintaining parallel service delivery structures. Yet the risk is weak services, undermining cost-effectiveness.



8 Recommendations

THE FOLLOWING RECOMMENDATIONS are for USAID staff and are divided into the six broad areas of this report: impact, nonprogram factors, program strategies, efficiency, financial sustainability, and management aspects.

Impact

- Work with host countries to assess the nature of unmet need and devise country-specific strategies to address it.
- Regularly gather and analyze data on trends in high-risk births—especially on the interval between births—to monitor and improve the health benefits of family planning programs. Surveys and other data collection instruments should be restructured to facilitate monitoring these indicators. As a high priority, implement strategies to encourage the spacing of births to two years or more.
- Target services and modern contraceptives to women who have had abortions. USAID and host governments should monitor acceptance of contraception and continuation rates for the postabortion target group in monitoring performance.
- Marshall data on the effects of high and low fertility at the household level and its consequences for national economic development. Use the information in policy dialog, especially when government commitment is limited.
- Improve documentation of USAID processes and intermediate results through improvements in the performance measurement and evaluation system. Family planning performance measurement plans should provide, at the minimum, the following information:

1) inputs (USAID inputs relative to other donors and the host government, and information on whether USAID is the sole or primary donor)

2) outputs (major USAID-supported outputs, planned and actual)

3) results (for example, analysis of USAID support for various contraceptive methods. For instance, USAID funded half of all female sterilizations from 1980 to 1990, and increased use of this method during the decade contributed 10 percent to the overall increase in the prevalence of contraception use)

- Use input, output, and results data to prepare matrices like box 1 to enhance USAID's and host governments' monitoring efforts and analysis of attribution of results to USAID.

Nonprogram Factors

- During USAID reviews of family planning program performance, ensure that 1) the question of government commitment is fully analyzed, 2) the reasons for lack of commitment are identified, and 3) appropriate strategies that respond to the analysis are implemented.
- In traditional cultures, invest in pilot programs to examine alternative strategies that may be compatible with local values. During program reviews, examine available data on the extent to which cultural and religious factors actually impede program objectives. Use the information to guide strategic planning.
- Target customized family planning information and services, expand counseling, and create information packets for illiterate and marginally literate women.
- Fund *country-specific* researchon clearly defined and relevant policy questions related to women's status and fertility.
- Examine carefully—and apply, as appropriate—lessons on the use of mobile clinics and teams in family planning and health services, as a strategy for reducing urban–rural disparities in contraceptive use.

Program Strategies

- Establish strategic planning and performance measurement systems in USAID-assisted family planning programs. Provide assistance in developing clear and realistic objectives, collecting and analyzing data to measure achievement of objectives, and using analysis in program planning and refinement.
- Train local, regional, and senior managers in modern management methods, especially in problem diagnosis and problem-solving, strategic planning and analysis, and the use of data in decision-making.
- Train USAID family planning managers in modern management methods to enhance their abilities to guide program development.
- For Missions with strategic objectives in population and family planning, define family planning policy dialog agendas, and include them in Mission strategic plans.
- Ensure that policy dialog activities are supported by data on the magnitude of the problem. Undertake follow-up analyses of the policy implications of the data.
- Annually monitor and analyze progress toward specific policy reforms needed to increase contraceptive use.
- Regularly examine trends in USAID family planning innovation as part of strategic planning and program reviews. Assess the operations research program and budget annually to identify approaches that merit wider application.
- Substantially increase funding for services, information and education, and operations research in male methods, especially vasectomy. Devise strategies to motivate men to assume greater responsibility for family planning, and ensure that these strategies are integrated into the strategic plan.
- For Missions with strategic objectives in population and family planning, include in the strategic plan specific education and communication objectives—such as enhancing use effectiveness or improving understanding of the advantages and disadvantages of all methods—rather than "to increase knowledge." Monitor the achievement of objectives annually.
- Review budgetary expenditures for information, education, and communication objectives to ensure that they are adequate to achieve specific objectives.

- Emphasize retaining current contraception users, as well as recruiting new ones. Use continuation rates as well as new-acceptor rates to evaluate the effectiveness of family planning programs. Monitor continuation rates annually through performance measurement plans.

Efficiency

- Ensure that gathering and analyzing cost data become integral and consistent elements of family planning design and strategic planning and monitoring. USAID should consider 1) including cost and cost-effectiveness analyses in strategic planning and program design exercises for family planning programs, 2) monitoring cost trends in component programs as part of performance measurement, and 3) improving efficiency and monitoring those improvements.

Sustainability

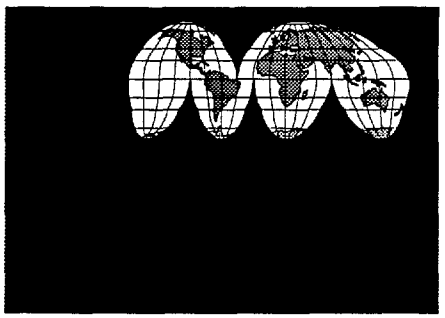
- Prepare strategic plans for achieving financial sustainability for all new programs. These plans should consider pilot cost-recovery schemes; studies to test the elasticity of demand; private sector delivery schemes; revenue-generation approaches; and a policy dialog agenda. Funding, implementing, monitoring, and evaluating pilot sustainability plans and programs should be a high priority. Monitor progress toward financial sustainability through each Mission's performance monitoring plan.
- Test and review experience with measures to reduce costs and improve financial viability of contraceptive commodity procurement, including possibilities for use of private sector procurement and logistics channels.
- Lead a major international effort of governments and donors to increase family planning service provision by the commercial private sector, and mobilize private sector resources for family planning in all USAID-assisted countries. The effort should consider: reviewing USAID's substantial experience to date; raising awareness among host governments; developing policy incentives; and implementing increased activities for private sector service provision. Monitor achievement of this objective through the Mission performance monitoring plan and other surveys, including the Demographic and Health Survey.
- For all contraceptive social marketing projects, prepare financial sustainability plans with specific objectives that address: private sector involvement; monitoring of consumer purchases, not only warehouse sales; logistics management; incentives for wholesalers and retailers; sustainability targets; return-to-project funds; and reduced competition resulting from distribution of free contraceptives by other channels.
- Use data on the contributions of family planning programs to the sustainability of social services programs in policy dialog with governments lacking commitment to family planning to increase their financial support for these programs.

Management Aspects

- Adopt strategies aimed at improving efficiency and effectiveness of family planning programs. These include monitoring program costs and cost trends; conducting cost-effectiveness studies; developing cost-recovery strategies; using for-profit delivery channels, leveraging in-country private sector resources; creating revenue-generating activities and working on efficiency improvements

such as retaining contraception users; and targeting services to groups in need—men as well as uneducated, postabortion, and postpartum women.

- Develop intermediate outcome indicators to complement the focus on contraceptive prevalence and fertility collaboratively with host government or private sector institutions and use them for regular performance monitoring.
- Review staffing patterns for USAID population and family planning programs to ensure consistency between Agency programmatic and strategic objectives and staff levels.
- Examine thoroughly the potential costs and benefits of integration before proceeding. If a decision is made to integrate, pilot test alternatives to strengthen family planning in health service delivery.



Bibliography

A.I.D.'s Role in Indonesian Family Planning: A Case Study with General Lessons for Foreign Assistance. 1979. Program Evaluation Report No. 2. Washington: USAID.

Aloui, T., M. Ayad, and H. Fourati. 1989. Enquete démographique et de santé en Tunisie, 1988 [Demographic and Health Survey in Tunisia]. Tunis: Office National de la Famille et de la Population; and Columbia, Md.: Institute for Resource Development/Macro Systems, Inc.

Ayad, Mohamed, Hussein Abdel-Aziz Sayed, and Ann A. Way. N.d. "Policy Implications of DHS Findings for Egypt, Morocco, and Tunisia" Photocopy. USAID.

Bennett, Anthony, Carl Frisen, Peerasit Kamnuansilpa, and John McWilliam. 1990. *How Thailand's Family Planning Program Reached Replacement Level Fertility: Lessons Learned,* Occasional Paper No. 4. Washington: Population Technical Assistance Project.

Bongaarts, J. 1978. "A Framework for Analyzing the Proximate Determinants of Fertility." *Population and Development Review* 4

Bongaarts, J. 1982. "The Fertility-Inhibiting Effects of the Intermediate Fertility Variables." *Studies in Family Planning* 13:179–89.

Bruce, Judith. 1990. "Fundamental Elements of the Quality of Care: A Simple Framework," *Studies in Family Planning* 21:61–91.

Bruce, Judith, and Anrudh Jain. 1991. "Improving the Quality of Care Through Operations Research." *Operations Research: Helping Family Planning Programs Work Better.* New York: Wiley and Sons.

Cochrane, Susan, and David Guilkey. 1991. "The Effects of Access on Contraceptive Use and Fertility in Tunisia." Photocopy. Chapel Hill: University of North Carolina.

Coeytaux, F.M., Taoufik Kilani, and Margaret McEvoy. 1987. "The Role of Information, Education, and Communication in Family Planning Service Delivery in Tunisia." *Studies in Family Planning* 18:229–34.

Coeytaux, F.M., D. Donaldson, T. Aloui, T. Kilaui, and H. Fourati. 1989. "An Evaluation of the Cost-Effectiveness of Mobile Family Planning Services in Tunisia." *Studies in Family Planning* 20:158–69.

Conly, Shanti R., J. Joseph Speidel, and Sharon L. Camp. 1991. *U.S. Population Assistance: Issues for the 1990s.* Washington: The Population Crisis Committee.

Cross, Harry E., Virginia H. Poole, Ruth E. Levine, and Richard M. Cornelius. 1991. "Contraceptive Source and the For-Profit

Private Sector in Third World Family Planning: Evidence and Implications from Trends in Private Sector Use in the 1980s." Paper presented at the 1991 Meeting of the Population Association of America, Washington.

Crouch, Luis. 1993. "Success in Policy Reform Through Policy Dialogue," Working Paper. Research Triangle Park, N.C.: Research Triangle Institute.

Dumm, John, Richard Cornelius, Roy Jacobstein, and Barbara Pillsbury. 1992. *Evaluation of A.I.D. Family Planning Programs: Kenya Case Study*. Technical Report No. 3. Washington: USAID.

Ghana Demographic and Health Survey 1988. 1989. Accra: Ghana Statistical Service; and Columbia, MD: Ghana and Institute for Resource Development/Macro Systems, Inc.

Hatcher, R.A., D. Kowal, F. Guest et al. 1989. *Contraceptive Technology: International Edition.* Atlanta: Printed Matter, Inc.

International Quality Study Best Practices Report: An Analysis of Management Practices That Impact on Performance. 1992. New York: Ernst and Young and the American Quality Foundation.

Jain, Anrudh. 1989. "Fertility Reduction and the Quality of Family Planning Services," *Studies in Family Planning* 20:1–16.

Janowitz, Barbara S., John H. Bratt, and Daniel Fried. 1990. Investing in the Future: A Report on the Cost of Family Planning in the Year 2000. Research Triangle Park, N.C.: Family Health International.

Kenya Demographic and Health Survey 1989. 1989. Nairobi, Kenya: National Council for Population and Development, Ministry of Home Affairs and National Heritage; and Institute for Resource Development/Macro Systems, Inc.

Lapham, R.J., and W.P. Mauldin. 1985. "Contraceptive Prevalence: The Influence of Organized Family Planning Programs." *Studies in Family Planning* 16:117–37.

Martin, Richard, Juan Buttari, Hector Macias, and Laurie Cobb. 1993. *A.I.D.'s Family Planning Program in Honduras.* Technical Report No. 9. Washington: USAID.

McClelland, Donald, Alan Johnston, Bonnie Pedersen, and Brad Schwartz. 1993. *Evaluation of A.I.D. Family Planning Programs: Ghana Case Study.* Technical Report No. 13. Washington: USAID.

McNicoll, G. 1992. "Changing Fertility Patterns in the Third World." *Annual Review of Sociology* 18:85–108, in *The Reproductive Revolution: New Survey Findings.* 1992. *Population Reports,* Series M, Number 1311. Baltimore: Population Information Program.

Overview of A.I.D. Population Assistance, FY 1992. 1993. Washington: USAID.

Performance Measurement for Strategic Management. 1992. Research Triangle Park, N.C.: Research Triangle Institute.

Pillsbury, Barbara, Elizabeth Maguire, et al. 1990. *Tunisia: Population Strategy for the 1990s.* Washington: USAID.

"The Reproductive Revolution: New Survey Findings." 1992. *Population Reports,* Series M 11:9.

Rea, Sam, Ray Martin, Maureen Norton, Mary Rice, Dan Kress, and Robert Schmeding. 1993. *Evaluation of A.I.D. Family Planning Programs: Tunisia Case Study,* Technical Report No. 15. Washington: USAID.

Ross, John A., W. Parker Mauldin, and Vincent C. Miller. 1993. *Family Planning and Population: A Compendium of International Statistics.* New York: The Population Council.

Ross, John A., and Elizabeth Frankenberg. 1993. *Findings from Two Decades of Family Planning Research.* New York: The Population Council.

Ross, John A., Marjorie Rich, and Janet P. Molzan. 1989. *Management Strategies for Family Planning Programs.* New York: Center for Population and Family Health.

Schmeding, Robert, Krishna Kumar, Keys MacManus, and Thomas Pullum. 1992. *Evaluation of A.I.D. Family Planning Programs: Philippines Case Study.* Technical Report No. 4. Washington: USAID.

Schmeding, Robert, Maureen Norton, Thomas Pullum, and James Tarvid. 1993. *Evaluation of A.I.D. Family Planning Programs: Pakistan Case Study.* Washington: USAID.

Stover, John, and Anne Wagman. 1992. *The Costs of Contraceptive Social Marketing Programs Implemented Through the SOMARC Project.* Special Study #1, Washington: USAID.

Technical Information on Population for the Private Sector: Final Project Report. 1991. Columbia, Md.: JSA Healthcare Corporation.

USAID/Lesotho 1987; USAID/Indonesia 1979; USAID/The Gambia 1987; USAID/Burkina Faso 1989.

References for the six case studies on which this synthesis is based are as follows:

Ghana

McClelland, Donald, Alan Johnston, Bonnie Pedersen, and Brad Schwartz. 1993. *Evaluation of A.I.D. Family Planning Programs: Ghana Case Study.* Technical Report No. 13. Washington: USAID.

Honduras

Martin, Richard, Juan Buttari, Hector Macias, and Laurie Cobb. 1993. *A.I.D.'s Family Planning Program in Honduras,* Technical Report No. 9. Washington: USAID.

Kenya

Dumm, John, Richard Cornelius, Roy Jacobstein, and Barbara Pillsbury. 1992. *Evaluation of A.I.D. Family Planning Programs: Kenya Case Study.* Technical Report No. 3. Washington: USAID.

Pakistan

Schmeding, Robert, Maureen Norton, Thomas Pullum, and James Tarvid. 1993. *Evaluation of A.I.D. Family Planning Programs: Pakistan Case Study.* Washington: USAID.

Philippines

Schmeding, Robert, Krishna Kumar, Keys MacManus, and Thomas Pullum. 1992. *Evaluation of A.I.D. Family Planning Programs: Philippines Case Study.* Technical Report No. 4. Washington: USAID.

Tunisia

Rea, Sam, Maureen Norton, Ray Martin, Mary Rice, and Dan Kress. 1993. *Evaluation of A.I.D. Family Planning Programs: Tunisia Case Study.* Technical Report No. 15. Washington: USAID.